

Service Manual

ViewSonic VG710b/s

Model No. VLCDS23719-4W

Model No. VLCDS23719-5W

17" Color TFT LCD Display

(VG710s/b-1_SM_718 Rev. 1a Feb. 2004)

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Revision History

| Revision | Date | Description Of Changes | Approval |
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| 1a | 02/26/04 | Initial Release DCN-3601 | Angela Luh |
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1. Precautions and Safety Notices

1. Appropriate Operation

- (1) Turn off the product before cleaning.
- (2) Use only a dry soft cloth when cleaning the LCD panel surface.
- (3) Use a soft cloth soaked with mild detergent to clean the display housing.
- (4) Use only high quality and safety approved AC/DC power adapter.
- (5) Disconnect the power plug from AC outlet if the product is not used for a long period of time.
- (6) If smoke, abnormal noise, or strange odor is present, immediately switch the LCD display off.
- (7) Do not touch the LCD panel surface with sharp or hard objects.
- (8) Do not place heavy objects on the LCD display, video cable, or power cord.
- (9) Do not use abrasive cleaners, waxes or solvents for your cleaning.
- (10) Do not operate the product under the following conditions:
 - Extremely hot, cold or humid environment.
 - Areas susceptible to excessive dust and dirt.
 - Near any appliance generating a strong magnetic field.
 - Place in direct sunlight.

2. Caution

No modification of any circuit should be attempted. Service work should only be performed after you are thoroughly familiar with all of the following safety checks and servicing guidelines.

3. Safety Check

Care should be taken while servicing this LCD display. Because of the high voltage used in the inverter circuit, the voltage is exposed in such areas as the associated transformer circuits.

4. Power Supply Requirements

The external power converter for this display utilizes AC and DC cords, AC cord is detachable, but DC cord is permanently attached. Any attempt to replace another adapter could result in serious problem on the display.







5. LCD Module Handling Precautions




5.1 Handling Precautions

- (1) Since front polarizer is easily damaged, pay attention not to scratch it.
- (2) Be sure to turn off power supply when inserting or disconnecting from input connector.
- (3) Wipe off water drop immediately. Long contact with water may cause discoloration or spots.
- (4) When the panel surface is soiled, wipe it with absorbent cotton or other soft cloth.
- (5) Since the panel is made of glass, it may break or crack if dropped or bumped on hard surface.
- (6) Since CMOS LSI is used in this module, take care of static electricity and insure human earth when handling.
- (7) Do not open nor modify the Module Assembly.
- (8) Do not press the reflector sheet at the back of the module to any directions.
- (9) In case if a Module has to be put back into the packing container slot after once it was taken out from the container, do not press the center of the CCFL Reflector edge. Instead, press at the far ends of the CFL Reflector edge softly. Otherwise the TFT Module may be damaged.
- (10) At the insertion or removal of the Signal Interface Connector, be sure not to rotate nor tilt the Interface Connector of the TFT Module.

- (11) After installation of the TFT Module into an enclosure (LCD monitor housing, for example), do not twist nor bend the TFT Module even momentarily. At designing the enclosure, it should be taken into consideration that no bending/twisting forces are applied to the TFT Module from outside. Otherwise the TFT Module may be damaged.
- (12) Cold cathode fluorescent lamp in LCD contains a small amount of mercury. Please follow local ordinances or regulations for disposal.
- (13) Small amount of materials having no flammability grade is used in the LCD module. The LCD module should be supplied by power complied with requirements of Limited Power Source (IEC60950 or UL1950), or be applied exemption.
- (14) The LCD module is designed so that the CFL in it is supplied by Limited Current Circuit (IEC60950 or UL1950). Do not connect the CFL in Hazardous Voltage Circuit.

5.2 Handling and Placing Methods

| Correct Methods: | Incorrect Methods: |
|---|--|
| Only touch the metal frame of the LCD panel or the front cover of the monitor. Do not touch the surface of the polarizer. | Surface of the LCD panel is pressed by fingers and that may cause “Mura.” |
|  |  |
|  |  |
| Take out the monitor with cushions | Taking out the monitor by grasping the LCD panel. That may cause “Mura.” |
|  |  |

| | |
|---|--|
| <p>Place the monitor on a clean and soft foam pad.</p> | <p>Placing the monitor on foreign objects. That could scratch the surface of the panel or cause "Mura."</p> |
|  |  |
| | <p>The panel is placed facedown on the lap. That may cause "Mura."</p>  |

2. Specification

1. General Requirements

General Specifications

| | |
|----------------------------------|---|
| Test Resolution & Frequency | “1280 x 1024” @ 60Hz |
| Test Image Size | Full Size |
| Contrast and Brightness Controls | Factory Default: Contrast = 50%, Brightness = 100% |

2. Signal Interface

Video Interface

| | |
|-------------------------------------|--|
| Analog Input Connector | DB-15 (Analog) |
| Digital Input Connector | DVI-D (Digital) |
| Default Input Connector | Defaults to the first detected input |
| Video Cable Connector DB-15 Pin out | Compliant DDC 1/2B. |
| Video Signals | 1. Video RGB (Analog) Separate Sync 2. TMDS (Digital) |
| Video Impedance | 75 Ohms (Analog), 100 Ohms (Digital) |
| Exclusions | Not compatible with interlaced video. |

3. Power

Power Supply

| | |
|-------------------------|----------------------------|
| External Power Supply | Part Number: LSE 0107A1240 |
| Input Voltage Range | 90 to 264 VAC |
| Over Voltage Protection | 12.7~18V FULL LOAD |
| Power Dissipation | 36 WATTS (TYP) |

4. Electrical Requirements

Horizontal / Vertical Frequency

| | |
|---|--|
| Horizontal Frequency | 30 – 82 kHz |
| Vertical Refresh Rate | 50 – 85 HZ |
| Maximum Pixel Clock | 135 MHz |
| Primary Preset | “1280 x 1024” @ 60Hz |
| Look up table timing | |
| <<Analog>> 1. 640 x 350 @ 70Hz, 31.5kHz 2. 640 x 480 @ 60Hz, 31.5kHz 3. 640 x 480 @ 67Hz, 35.0kHz 4. 640 x 480 @ 75Hz, 37.5kHz 5. 640 x 480 @ 72Hz, 37.9kHz 6. 640 x 480 @ 85Hz, 43.27kHz 7. 720 x 400 @ 70Hz, 31.5kHz 8. 800 x 600 @ 56Hz, 35.1kHz 9. 800 x 600 @ 60Hz, 37.9kHz 10. 800 x 600 @ 75Hz, 46.9kHz 11. 800 x 600 @ 72Hz, 48.1kHz 12. 800 x 600 @ 85Hz, 53.7kHz 13. 832 x 624 @ 75Hz, 49.7kHz 14. 1024 x 768 @ 60Hz, 48.4kHz 15. 1024 x 768 @ 70Hz, 56.5kHz 16. 1024 x 768 @ 72Hz, 58.1kHz 17. 1024 x 768 @ 75Hz, 60.0kHz 18. 1024 x 768 @ 85Hz, 68.67kHz 19. 1280 x 1024 @ 60Hz, 63.4kHz 20. 1280 x 1024 @ 75Hz, 79.97kHz | <<Digital>> 640 x 350 @ 70Hz, 31.5kHz 640 x 400 @ 60Hz, 31.5kHz 640 x 480 @ 60Hz, 31.5kHz 640 x 480 @ 75Hz, 37.5kHz 640 x 480 @ 72Hz, 37.9kHz 640 x 480 @ 85Hz, 43.27kHz 720 x 400 @ 70Hz, 31.5kHz 800 x 600 @ 56Hz, 35.1kHz 800 x 600 @ 60Hz, 37.9kHz 800 x 600 @ 75Hz, 46.9kHz 800 x 600 @ 72Hz, 48.1kHz 800 x 600 @ 85Hz, 53.7kHz 1024 x 768 @ 60Hz, 48.4kHz 1024 x 768 @ 70Hz, 56.5kHz 1024 x 768 @ 72Hz, 58.1kHz 1024 x 768 @ 75Hz, 60.0kHz 1024 x 768 @ 85Hz, 68.67kHz 1280 x 1024 @ 60Hz, 63.4kHz |

Changing Modes

| | |
|---|---|
| Maximum Mode Change Blank Time for image stability. Note: 1) Excluding “Auto Adjust” time 2) Under DOS mode (640 x 350, 720 x 400 & 640 x 400), there is no “Auto Adjust” feature. 3) The monitor needs to do “Auto Adjust” the first time a new mode is detected. | Under 5 seconds (Maximum) 1 seconds (Typ.) for recognized timings 1-2 seconds (Typ.) for unrecognized timing . |
|---|---|

5. Audio

Speaker Specification

| | |
|---------------------------------|------------------------|
| Line input connection | 3.5 mm stereo jack |
| Line input signal | 1.0 Vrms |
| Line input impedance | 10 kOhm |
| Maximum power output (Electric) | 3 W @ < 5 % DISTORTION |
| Signal to Noise Ratio | 72 dB |
| Frequency response | 400 Hz – 20 kHz |
| Distortion | < 5 % THD (@1kHz), |

6. LCD Panel

Panel Characteristics

| | |
|--|---|
| Panel Type | “LG LM170E01-A5” |
| Type | “TFT ACTIVE MATRIX |
| Active Size | 337.9 (H) x 270.3 (V) |
| Pixel Arrangement | RGB Vertical Stripe |
| Pixel Pitch | 0.264 mm |
| Glass Treatment | Anti Glare (Hard coating 3H) |
| # of Backlights | 4 CCFL edge-light (2 top / 2 bottom) |
| Backlight Life | 50,000 Hours (minimum) |
| Panel Performance | |
| Luminance – Condition: CT = 6500K, Contrast = Max, Brightness = Max | 250 cd/m ² (typ. after 30-minute warm-up) 200 cd/m ² (minimum after 30-minute warm-up) |
| Brightness Uniformity | $\Delta L_s = \text{Max } 1.3$ $\Delta L_s = \text{Maximum Luminance/}$ Minimum Luminance |
| Contrast Ratio | 450:1 (typ.), 300:1 (minimum) |
| Color Depth | 16 Million colors (8 bit panel) |
| Viewing Angle (Horizontal) | 140 degrees @ CR>10, 160 degrees @ CR>5 |
| Viewing Angle (Vertical) | 120 degrees @ CR>10, 140 degrees @ CR>5 |
| Response Time 10%-90% @ Ta=25°C | 16 ms (Tr= 2 ms, Tf= 14 ms) (typ.) 30 ms (Tr= 6 ms, Tf= 24 ms) (maximum) |

Note: The 2nd source of LCD panel is “AU M170EN05.”

7. Mechanical

Dimensions

| | |
|-------------------|--------------------|
| Width | 378 mm |
| Height | 405 mm |
| Depth | 177 mm |
| Depth (Head Only) | 50 mm |
| Monitor Weight | 5.3 kg / 11.66 lbs |

Ergonomics

| | |
|-----------|--------------------|
| Tilt Up | 20 DEGREES MINIMUM |
| Tilt Down | -5 degrees |

8. Environmental

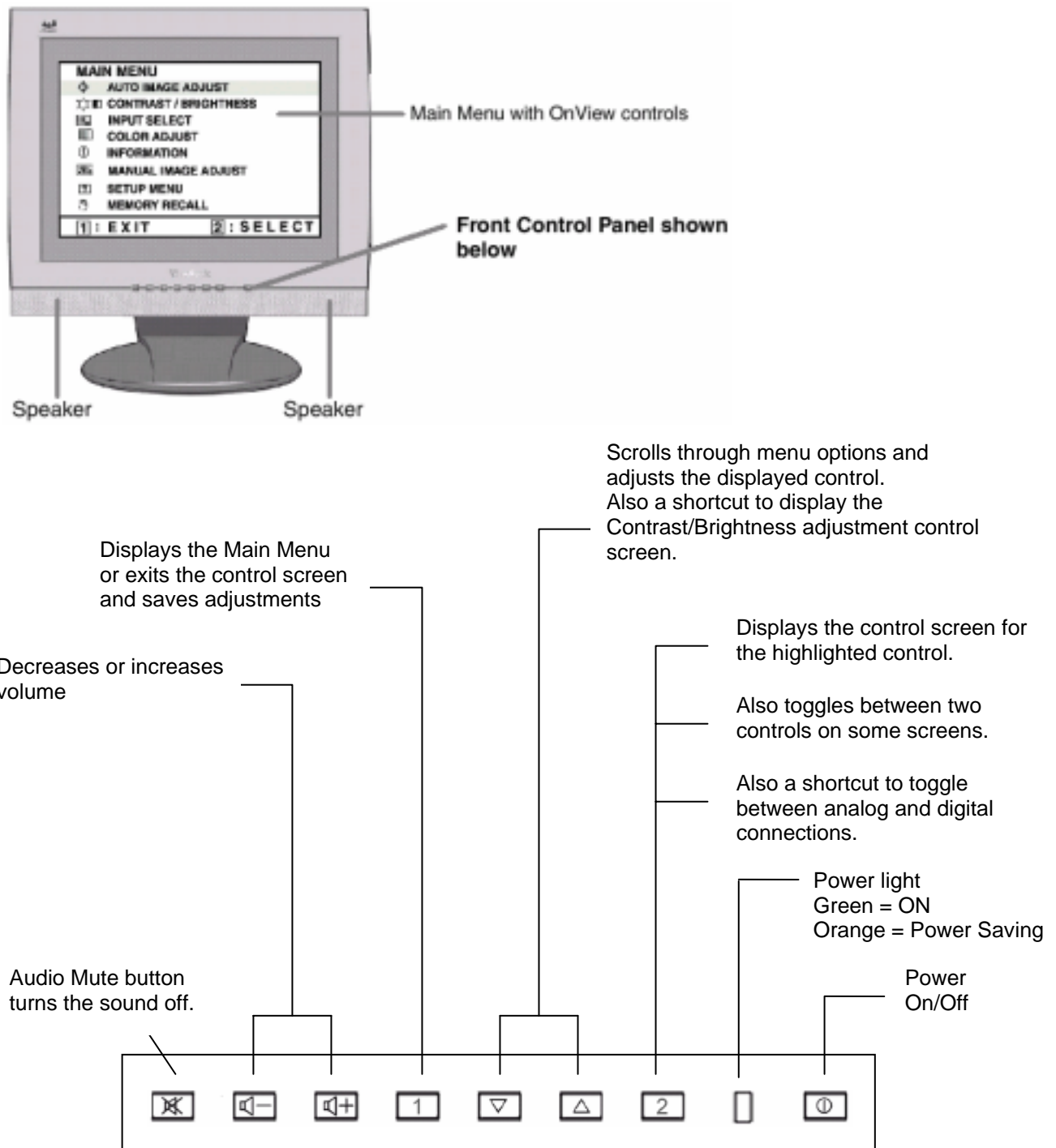
Environmental Conditions

| | |
|-----------------------------|------------------------------|
| Operating Temperature | 0°C to +40°C |
| Storage Temperature | -20°C to +60°C |
| Operating Relative Humidity | 20% to 80% RH Non-Condensing |
| Storage Relative Humidity | 5% to 90% RH Non-Condensing |
| Operating Altitude | 0 to +3,000 meters |
| Storage Altitude | 0 to +12,000 meters |

3. Front Panel Function Control Description

1. Control Location

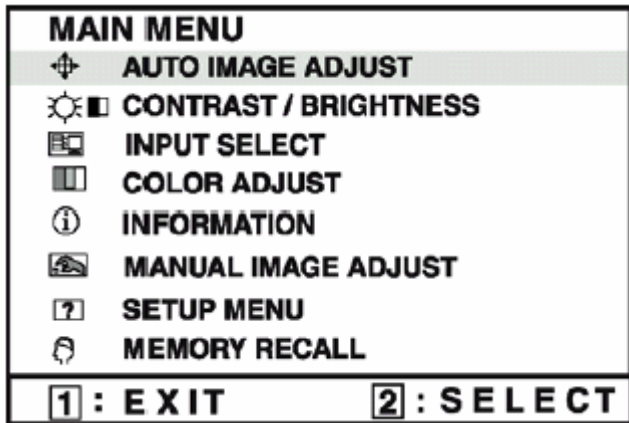
Use the buttons on the front control panel to display and adjust the On View controls which display on the screen.



2. OSD Menu Controls

Select the menu items shown below by using the up [▲] and down [▼] buttons.

Main Menu:



Auto Image Adjust -- adjusts sizes and centers the screen image automatically.

Contrast -- adjusts the difference between the image background (black level) and the foreground (white level).

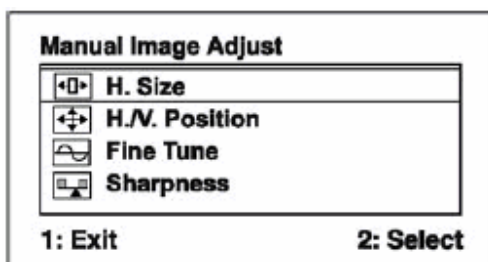
Brightness -- adjusts background black level of the screen image.

Input Select -- toggles between inputs if you have more than one computer.

Color Adjust -- provides several color adjustment modes: preset color temperatures and **RGB**, which allow you to adjust red (**R**), green (**G**), and blue (**B**) separately. The factory setting for this product is 6500K (6500 Kelvin).

Memory Recall -- returns the adjustments back to factory settings if the display is operating in a factory Preset Timing Mode listed in the Specifications of this manual.

Manual Image Adjust:



H. Size (Horizontal Size) -- adjusts the width of the screen image.

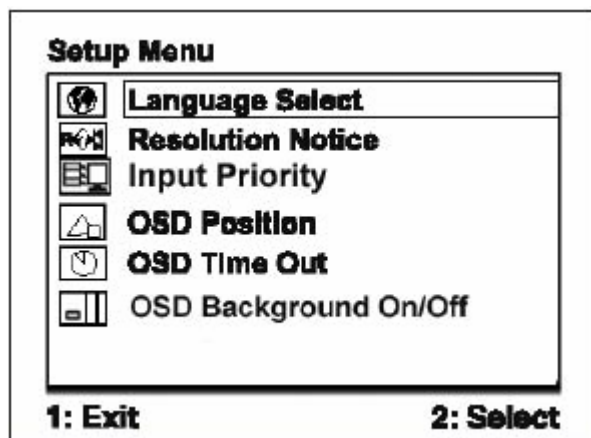
H./V. Position (Horizontal/Vertical Position) -- moves the screen image left or right and up or down.

Fine Tune -- sharpens the focus by aligning the text and/or graphic characters.

NOTE: Try Auto Image Adjust first.

Sharpness -- adjusts the clarity and focus of the screen image.

Setup Menu:



Language -- allows you to choose the language used in the menus and control screens.

Resolution Notice -- allows you to enable or disable the resolution notice.

OSD Position -- allows you to move the on-screen display menus and control screens.

OSD Timeout -- sets the length of time the on-screen display screen is displayed. For example, with a “30 second” setting, if a control is not pushed within 30 seconds, the display screen disappears.

OSD Background On/Off -- allows you to turn the On-Screen Display background On or Off.

3. Hot Keys for Function Controls

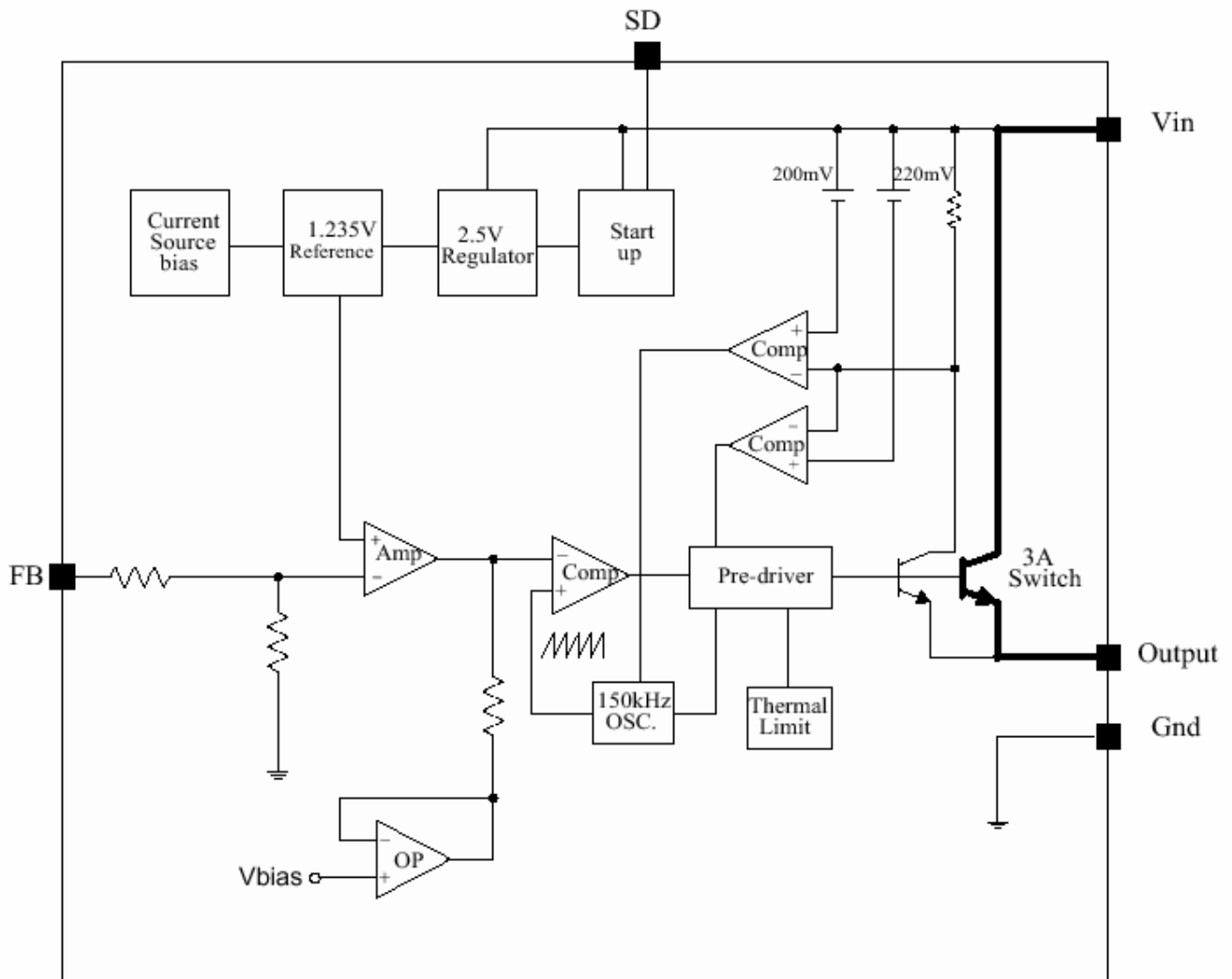
| Buttons: | Functions: |
|---|---|
| [Up] + [Down] arrows | recall <i>Contrast</i> or <i>Brightness</i> while in the <i>Contrast</i> or <i>Brightness</i> adjustment, or recall both of <i>Contrast</i> and <i>Brightness</i> when the OSD is not on. |
| [Volume-] + [Volume+] | recall <i>volume</i> to 50% while in <i>volume</i> adjustment, or when OSD is not on. |
| [1] + [2] | toggle 720x400 and 640x400 mode when input 720x400 or 640x400 mode. |
| [1] + [Up] + [Down] | <i>White Balance</i> . <i>White Balance</i> should set the screen on the pure black and white pattern with 640*480@60Hz resolution. |
| [1] + [Down] (hold for 10 seconds) | <i>Power Lock (Unlock)</i> . User won't be able to turn off the monitor. |
| [1] + [Up] (hold for 10 seconds) | <i>OSD Lock (Unlock)</i> . It will lock all functions, including “Volume” and “Mute”. |
| [Up] + [Down] + [Power On] with signal (hold for 3 seconds) | <i>All Mode Reset</i> . It will erase all end users' settings and restore the factory defaults. |
| [Up] + [Down] + [Power On] without signal (hold for 3 seconds) | <i>Burn in Mode</i> . After entering <i>Burn in Mode</i> , press [1] button, you can find the information about this monitor. |

4. Circuit Description

1. Power supply (DC/DC Converter)

The AP1501 is monolithic IC designed for M/B DC/DC converter, with the ability of driving a 3A load without any additional transistor component.

The AP1501 operates at a switching frequency of 150 kHz and thus allows smaller-sized filter components than would be needed with lower frequency switch regulator.



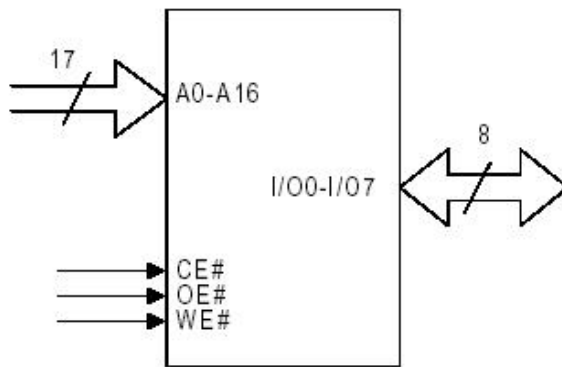
2. Flash Memory

The Pm39LV010R is a 1 Megabit, 3.3 Volt-only Flash Memory organized as 131,072 bytes of 8 bits each. This device is designed to use a 3.0 Volt to 3.6 Volt power supply to perform in-system programming.

The 1 Megabit memory array is divided into thirty-two uniform blocks of 4 Kbytes each for data and/or code storage.

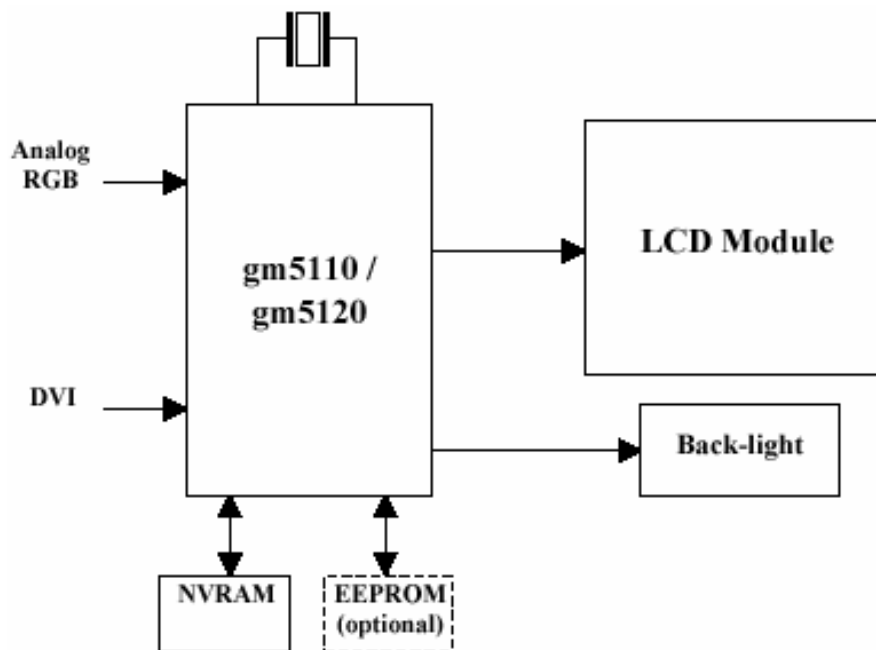
The block architecture allows users to flexibly make chip erase or block erase operation. The block erase feature allows a particular block to be erased and reprogrammed without affecting the data in other blocks. After the device performs chip erase or block erase operation, it can be reprogrammed on a byte-by-byte basis.

LOGIC SYMBOL



3. GM5120

The gm5110/20 is a graphic processing IC for Liquid Crystal Display (LCD) monitors at XGA/SXGA resolution. It provides all key IC functions required for the highest quality LCD monitors. On-chip functions include a high-speed triple-ADC and PLL, Ultra-Reliable DVI™ receiver, a high quality zoom and shrink scaling engine, an on-screen display (OSD) controller, digital color controls and an on-chip microcontroller (OCM). With this level of integration, the gm5110/20 devices simplify and reduce the cost of LCD monitors while maintaining a high-degree of flexibility and quality.



gm5110/5120 System Design Example

4. LVDS (THC63LVDM83A)

The THC63LVDM83A transmitter converts 28 bits of CMOS/TTL data into LVDS (Low Voltage Differential Signaling) data stream. A phase-locked transmit clock is transmitted in parallel with the data streams over a fifth LVDS link. The HC63LVDM83A can be programmed for rising edge or falling edge clocks through a dedicated pin. The THC63LVDF84A receiver converts the LVDS data streams back into 28 bits of CMOS/TTL data with falling edge clock. At a transmit clock frequency of 85MHz, 24 bits of RGB data and 4 bits of LCD timing and control data (HSYNC, VSYNC, CNTL1, CNTL2) are transmitted at a rate of 595 Mbps per LVDS data channel.

5. Adjusting Procedure

1. Function Test

1.1 Product

- 17" LCD Monitor

1.2 Test Equipment

- Color Video Signal & Pattern (or PC with SXGA resolution and a sound card)

1.3 Test Condition

Before function test and alignment, each LCD Monitor should be warmed up for at least 30 minutes with the following conditions:

- (a) In room temperature,
- (b) With full-white screen, RGB, and Black
- (c) With cycled display modes,
 - 640*480 (H=43.27kHz, V=85Hz)
 - 800*600 (H=53.7kHz, V=85Hz)
 - 1024*768 (H=68.67kHz, V=85Hz)
 - 1280*1024 (H=79.97kHz, V=75Hz)

1.4 Test Display Modes & Pattern

1.4.1 Compatible Modes

| Analog | Digital |
|----------------------------------|-----------------------------|
| 1. 640 x 350 @ 70Hz, 31.5kHz | 640 x 350 @ 70Hz, 31.5kHz |
| 2. 640 x 480 @ 60Hz, 31.5kHz | 640 x 400 @ 60Hz, 31.5kHz |
| 3. 640 x 480 @ 67Hz, 35.0kHz | 640 x 480 @ 60Hz, 31.5kHz |
| 4. 640 x 480 @ 75Hz, 37.5kHz | 640 x 480 @ 75Hz, 37.5kHz |
| 5. 640 x 480 @ 72Hz, 37.9kHz | 640 x 480 @ 72Hz, 37.9kHz |
| 6. 640 x 480 @ 85Hz, 43.27kHz | 640 x 480 @ 85Hz, 43.27kHz |
| 7. 720 x 400 @ 70Hz, 31.5kHz | 720 x 400 @ 70Hz, 31.5kHz |
| 8. 800 x 600 @ 56Hz, 35.1kHz | 800 x 600 @ 56Hz, 35.1kHz |
| 9. 800 x 600 @ 60Hz, 37.9kHz | 800 x 600 @ 60Hz, 37.9kHz |
| 10. 800 x 600 @ 75Hz, 46.9kHz | 800 x 600 @ 75Hz, 46.9kHz |
| 11. 800 x 600 @ 72Hz, 48.1kHz | 800 x 600 @ 72Hz, 48.1kHz |
| 12. 800 x 600 @ 85Hz, 53.7kHz | 800 x 600 @ 85Hz, 53.7kHz |
| 13. 832 x 624 @ 75Hz, 49.7kHz | 1024 x 768 @ 60Hz, 48.4kHz |
| 14. 1024 x 768 @ 60Hz, 48.4kHz | 1024 x 768 @ 70Hz, 56.5kHz |
| 15. 1024 x 768 @ 70Hz, 56.5kHz | 1024 x 768 @ 72Hz, 58.1kHz |
| 16. 1024 x 768 @ 72Hz, 58.1kHz | 1024 x 768 @ 75Hz, 60.0kHz |
| 17. 1024 x 768 @ 75Hz, 60.0kHz | 1024 x 768 @ 85Hz, 68.67kHz |
| 18. 1024 x 768 @ 85Hz, 68.67kHz | 1280 x 1024 @ 60Hz, 63.4kHz |
| 19. 1280 x 1024 @ 60Hz, 63.4kHz | |
| 20. 1280 x 1024 @ 75Hz, 79.97kHz | |

1.4.2 Function Test Display Pattern

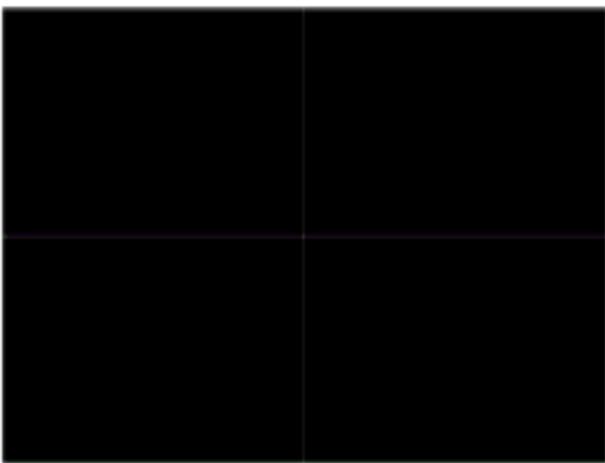
| Item | Test Content | Pattern | Specification | Remark |
|------|-----------------------------|---------------------------------|---|----------------|
| 1 | Frequency & Tracking | Fine Line Moire | Eliminate visual wavy noise. | Figure 1 |
| 2 | Contrast/Brightness | 16 Gray Scale | 16 gray levels should be distinguishable. | Figure 2 |
| 3 | Boundary | Horizontal & Vertical Thickness | Horizontal and Vertical position of video should be adjustable to be within the screen frame. | Figure 3 |
| 4 | RGB Color Performance | RGB Color Intensities | Contrast of each R, G, B, color should be normal. | Figure 4, 5, 6 |
| 5 | Screen Uniformity & Flicker | Full White | Should be compliant with the spec. | Figure 7 |
| 6 | Dead Pixel/Line | White Screen & Dark Screen | The numbers of dead pixels should be compliant with the spec. | Figure 7, 8 |
| 7 | White Balance | White & Black Pattern | The screen must have the pure white and black pattern, no other color. | Figure 9 |



Fine Line Moire Pattern (Figure1)



Gray Scale Pattern (Figure2)



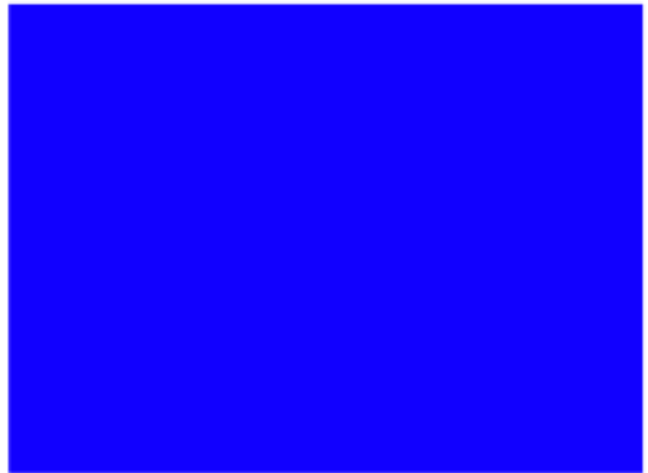
Horizontal & Vertical Thickness Pattern (Figure 3)



R. Color Pattern (Figure 4)



G. Color Pattern (Figure5)



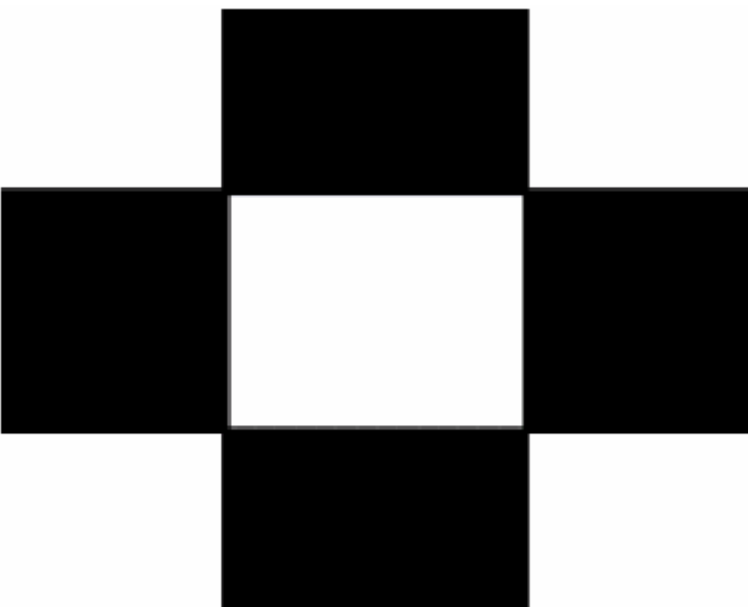
B. Color Pattern (Figure 6)



Full White Pattern (Figure 7)



Dark Screen Pattern (Figure 8)



Black-White Pattern (Figure 9)

1.5 Function Test and Alignment Procedure

1.5.1 All Modes Reset

You should do “All Mode Reset” (Refer to Chapter III-3. Hot Keys for Function Controls) first. This action will allow you to erase all end-user’s settings and restore the factory defaults.

1.5.2 Auto Image Adjust

Please select and enter “**Auto Image Adjust**” function on Main Menu to see if it is workable. The “**Auto Image Adjust**” function is aimed to offer a better screen quality by built-in ASIC. For optimum screen quality, the user has to adjust each function manually.

1.5.3 Firmware

Test Pattern: Burn In Mode (Refer to Chapter III-3. Hot Keys for Function Controls)

- Make sure the F/W is the latest version.

1.5.4 DDC

Test Pattern: EDID program

- Make sure it can pass test program.

1.5.5 Fine Tune and Sharpness

Test Signal: 1280*1024@60Hz

Test Pattern: Line Moire Pattern

- Check and see if the image has noise and focus performs well. Eliminate visual line bar.

- If not, readjust by the following steps:

(a) Select and enter “**Fine Tune**” function on “**Manual Image Adjust**” to adjust the image to eliminate visual wavy noise.

(b) Then, select and enter “**Sharpness**” function to adjust the clarity and focus of the screen image.

1.5.6 Boundary

Test Signal: 1280*1024@60Hz

Test Pattern: Horizontal & Vertical Line Thickness Pattern

- Check and see if the image boundary is within the screen frame.

- If not, readjust by the following steps:

(a) Select and enter “**Manual Image Adjust**” function on OSD Main Menu.

(b) Then, select and enter “**Horizontal Size**” or “**Horizontal/Vertical Position**” function to adjust the video boundary to be full scanned and within screen frame.

1.5.7 White Balance

Test Signal: 640*480@60Hz

Test Pattern: White and Black Pattern

1.5.8 R, G, B, Colors Contrast

Test Signal: 1280*1024@60Hz

Test Pattern: R, G, B, Color Intensities Pattern and 16 Gray Scale Pattern

- Check and see if each color is normal and distinguishable.
- If not, please return the unit to repair area.

1.5.9 Screen Uniformity and Flicker

Test Signal: 1280*1024@60Hz

Test Pattern: Full White Pattern

- Check and see if it is in normal condition.

1.5.10 Dead Pixel and Line

Test Signal: 1280*1024@60Hz

Test Pattern: Dark and White Screen Pattern

- Check and see if there are dead pixels on LCD panel with shadow gauge and filter film.
- The total numbers and distance of dead pixels should be compliant with the spec.

1.5.11 Mura

Test Pattern: White, RGB, Black, & Grey

Test Tool: 10% ND Filter

- Check if the Mura can pass 10% ND Filter.

1.5.12 Audio

Test Signal: Voice signal (optional, depend on model)

Test Pattern: liberty

- Make sure there is audio output.
- Make sure that audio function (volume 80%) is working without noise and resonance.
- Make sure that the sound of right and left speakers are in balance.

1.5.13 Check for Secondary Display Modes

Test Signal:

Analog: 640*350@70Hz; 640*480@60/67/72/75/85Hz;
720*400@70Hz; 800*600@56/60/72/75/85Hz;
832*624@75Hz, 1024*768@60/70/72/75/85Hz;
1280*1024@60/75Hz

Digital: 640*350@70Hz; 640*480@60/72/75/85Hz;
720*400@70Hz; 800*600@56/60/72/75/85Hz;
1024*768@60/70/72/75/85Hz; 1152*870@75Hz,
1280*720@60Hz, 1280*1024@60Hz

- Normally when the primary mode 1280*1024@60Hz is well adjusted and compliant with the specification, the secondary display modes will also be compliant with the spec. But we still have to check with the general test pattern to make sure every secondary is compliant with the specification.

1.5.14 All Modes Reset

After final QC step, we have to erase all saved changes again and restore the factory defaults. You should do “All Mode Reset” again.

1.5.15 Power Off Monitor

Turn off the monitor by pressing “Power” button.

2. Firmware Upgrade Procedure

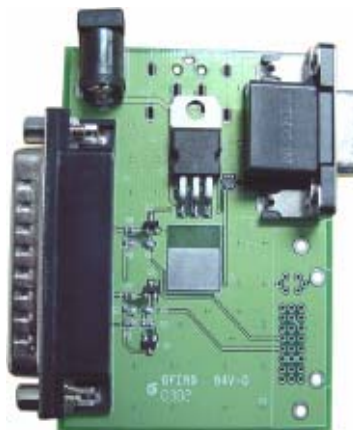
When you receive the returned monitor, please check whether the firmware version is the latest. If not, please do the following procedures to upgrade it to the latest version.

2.1 Equipment Needed

- VG710 Monitor
- Fixture for Firmware Upgrade
- Power Adapter (P/N: 47.58201.001) *1 for Fixture
- VGA Cable (P/N: 42.59901.003) *1(Pin 4, 11 should be connected to GND)
- PC (Personal Computer)
- LPT Cable (P/N: 42.59906.001) *1
- Firmware Upgrade Program
- One additional monitor for checking the program execution



PC



Fixture



VG710



Power Adapter for Fixture
(P/N: 47.58201.001)



LPT Cable
(P/N: 42.59906.001)



VGA Cable
(P/N: 42.59901.003)

2.2 Setup Procedure

2.2.1 Connect P2 of Fixture with printer port of PC by LPT Cable.

2.2.2 Connect P1 of Fixture with VG710 Monitor by VGA Cable.

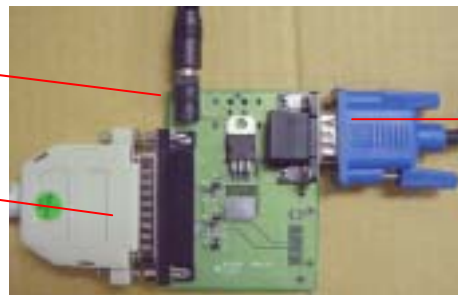
2.2.3 Plug Power Adapter to Fixture.

2.2.4 Connect Power Cord to VG710 Monitor.

2.2.5 Connect PC to the additional monitor.

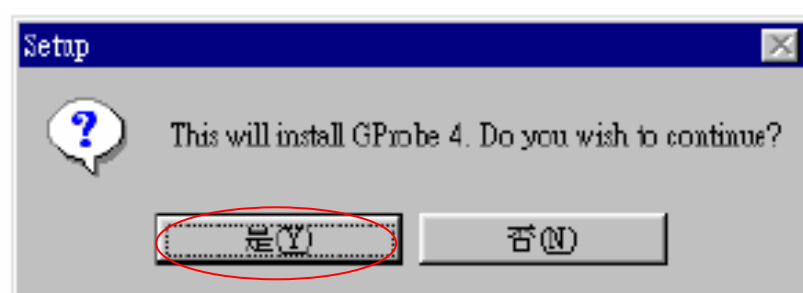
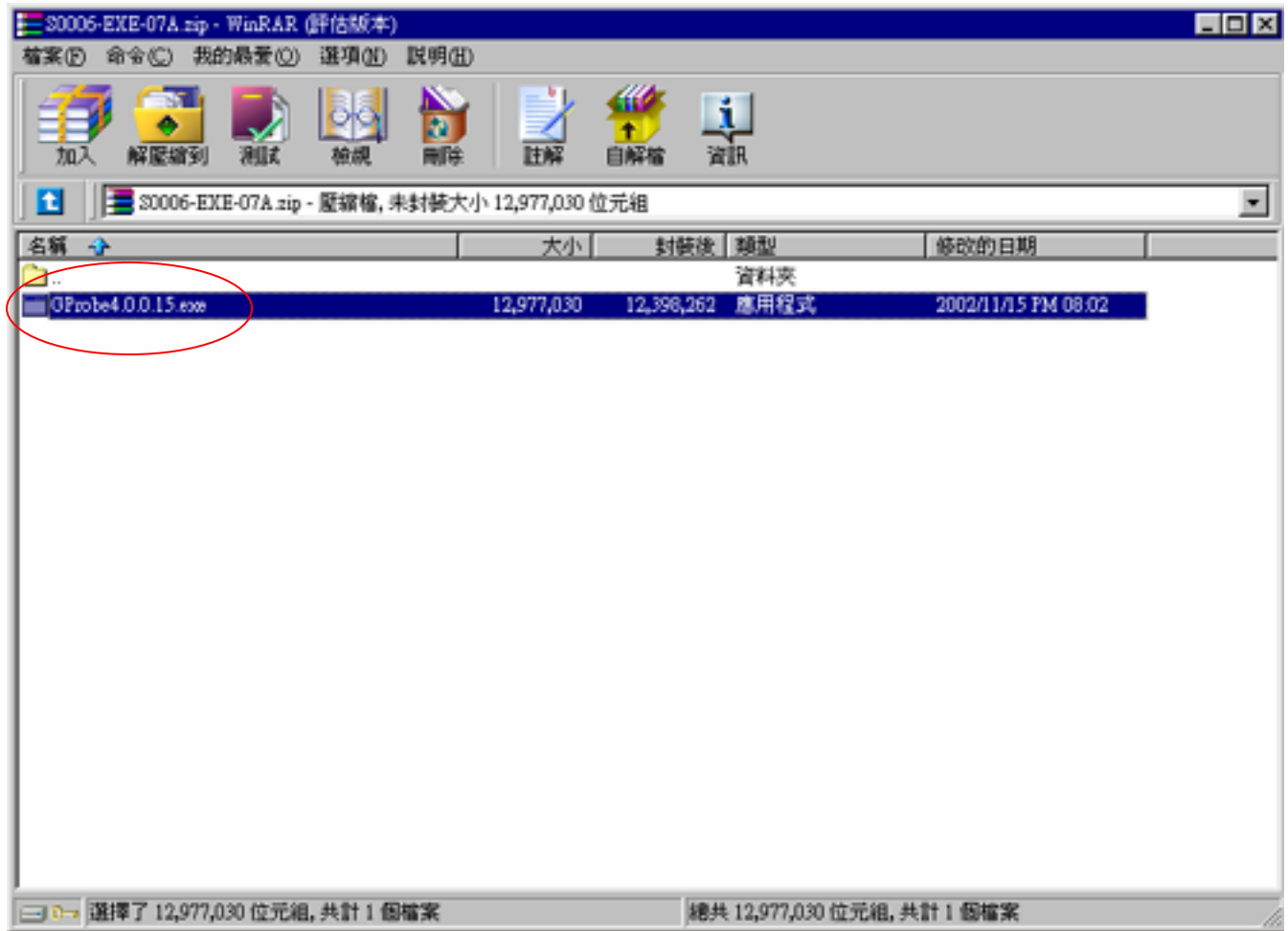
JP1: to Power Adapter

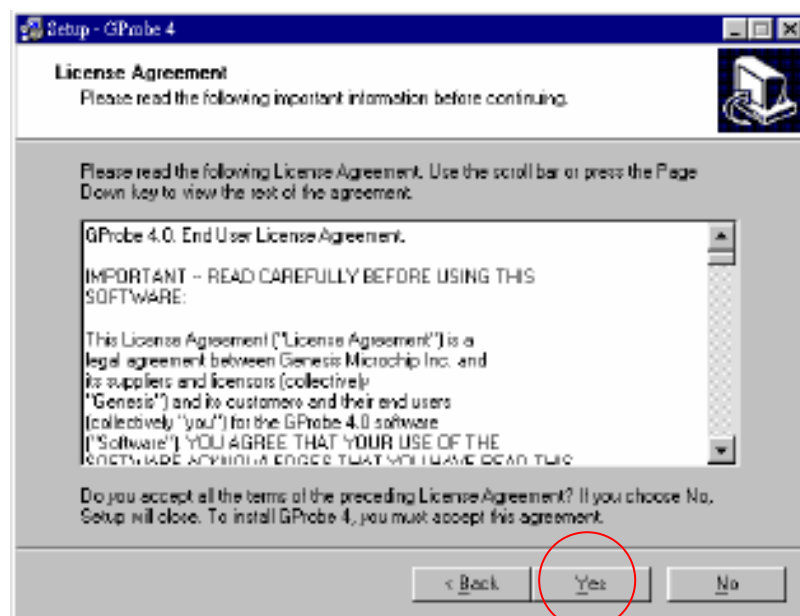
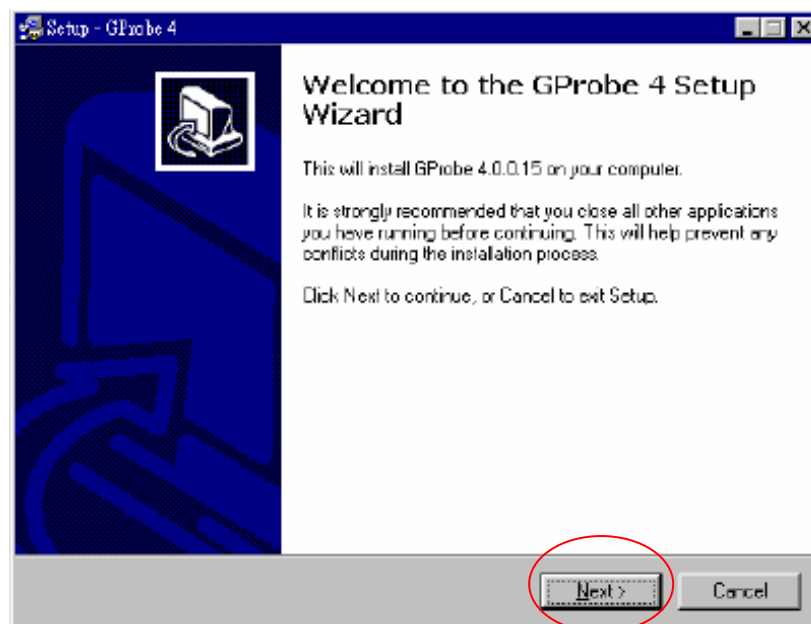
P2: to LPT Cable

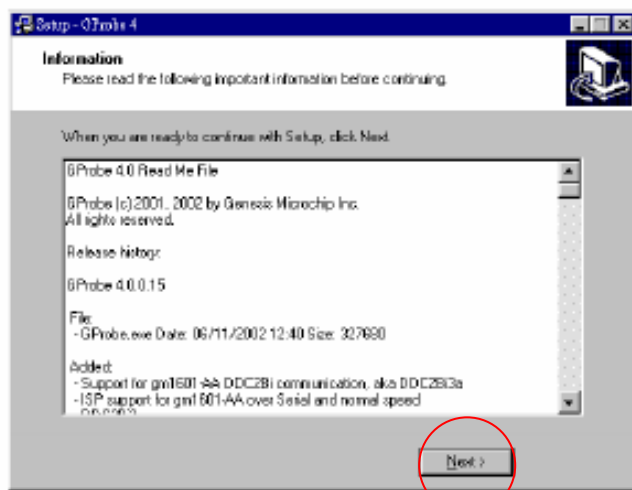
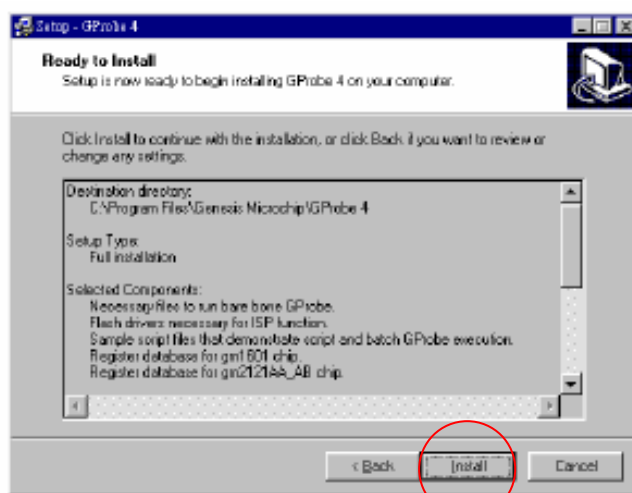
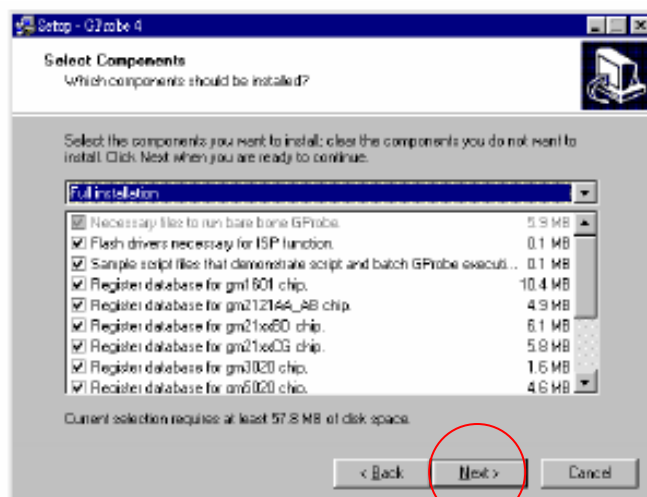


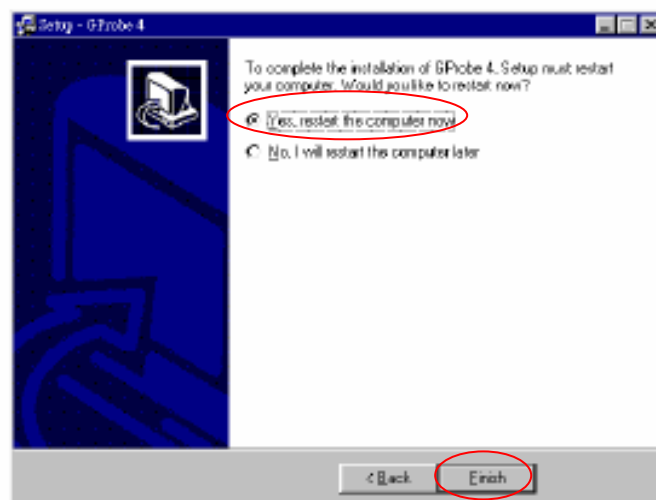
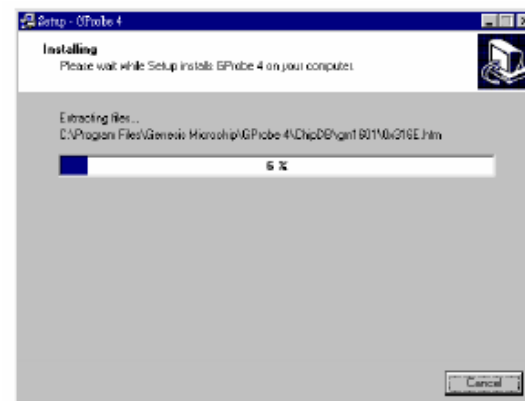
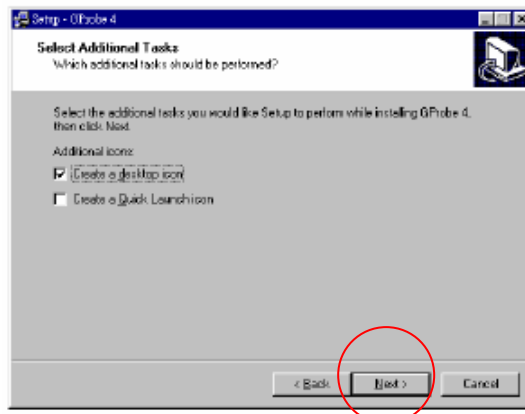
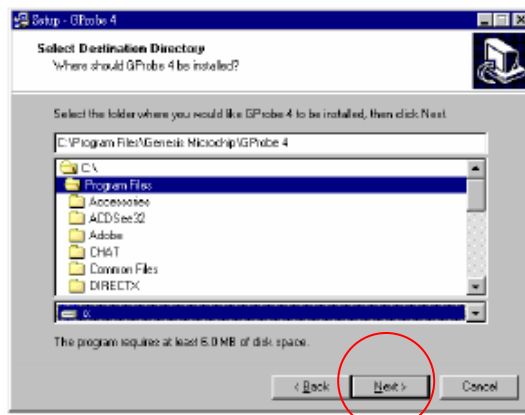
P1: to VGA Cable

2.2.6 Install GProbe Program by selecting and clicking Gprobe icon. Press “Yes” or “Next” buttons until the installation is complete.





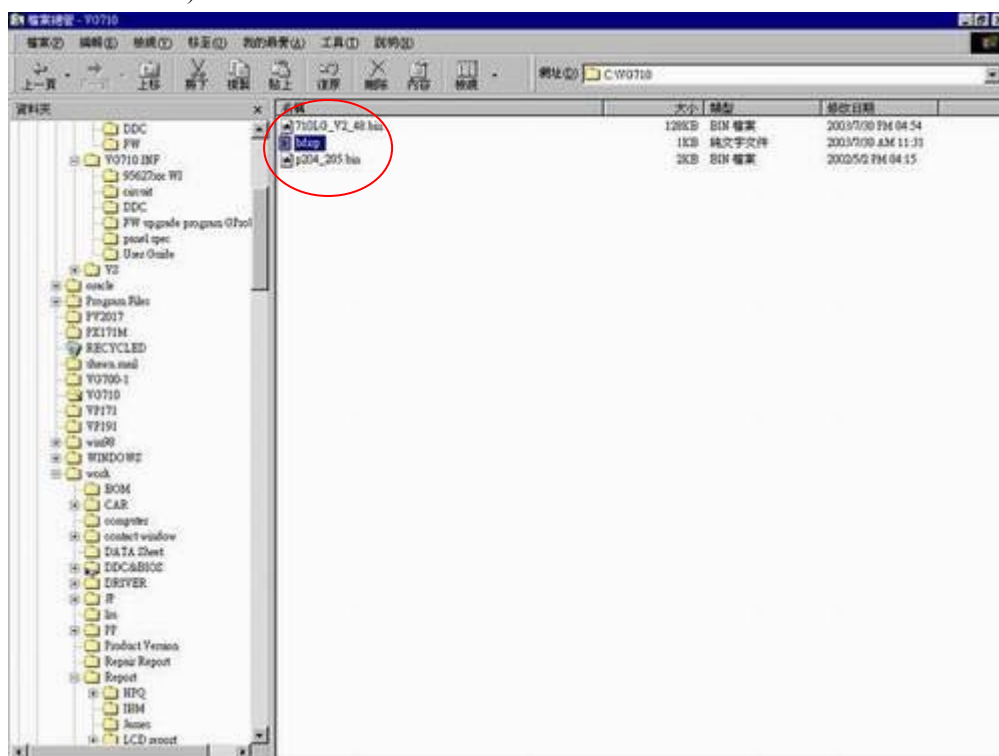




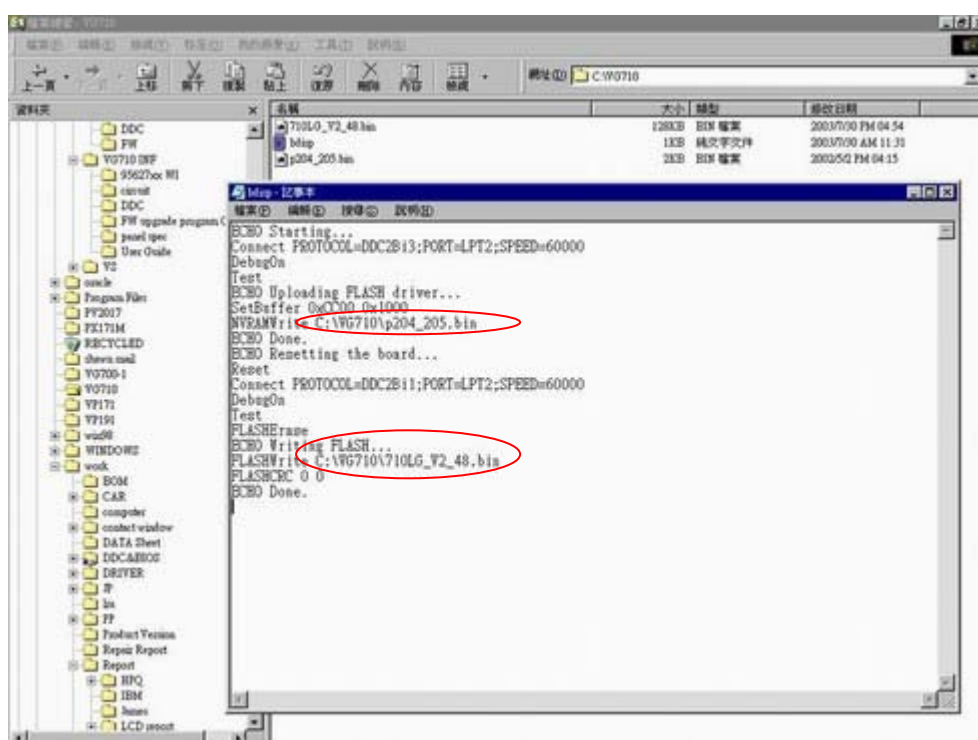
2.3 Firmware Upgrade Procedure

Step 1. Let VG710 enter Burn In Mode. (Refer to Chapter III-3. Hot Keys for Function Controls).

Step 2. Save these three files<bdisp.txt>, <p204_205.bin> and <710LG_V2_48.bin> in a hard disk (**better in a root directory**, e.g. C:\ or D:\).



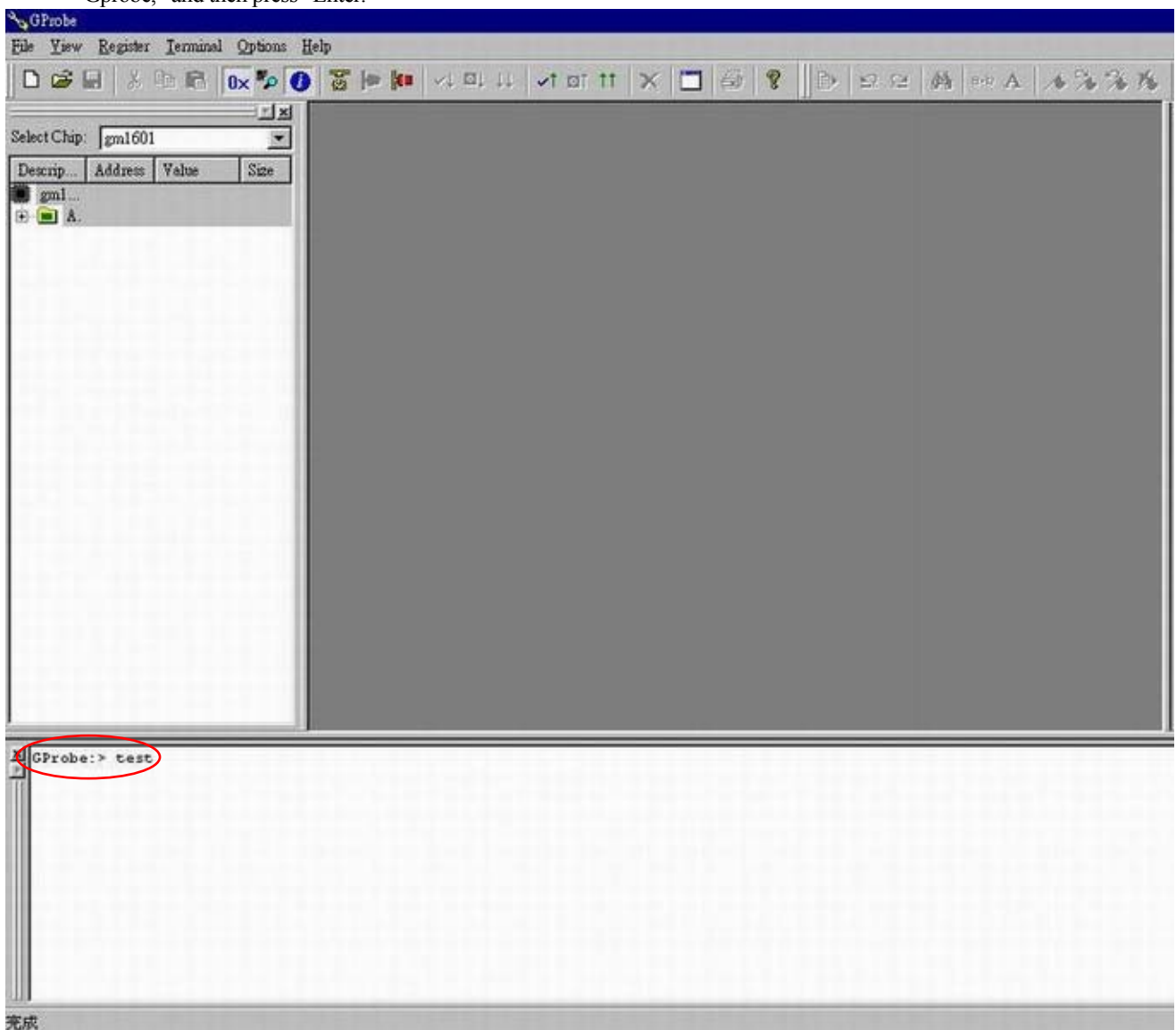
Step 3. Open <bdisp.txt> file. Key in the path where you save the driver <p204_205.bin> and firmware <710LG_V2_48.bin>.



The screenshot shows a Windows XP desktop with a blue background. A red circle highlights the 'Xinlei4' icon, which is a small application icon with a blue and white design. A red arrow points from the circle to the icon. The desktop contains various other icons, including '我的电脑' (My Computer), 'Internet Explorer', 'Microsoft Word', '我的文档' (My Documents), '新装新输入法 26a 安装程式' (Newly Installed Input Method 26a Installation Program), 'Microsoft Excel', 'Internet Explorer', '迅雷' (Xunlei), '迅雷 - 新装', '网际网路上的电脑' (Computers on the Internet), 'R11 Post', '迅雷 - 迅雷 2.0', '资源回收筒' (Recycle Bin), 'ACDSee 7.2', 'WinRAR', 'Microsoft Outlook', 'Acrobat Reader 5.0', '捷成 - Show', 'Outlook Express', 'Win2k 7.0', and '7500_1'.

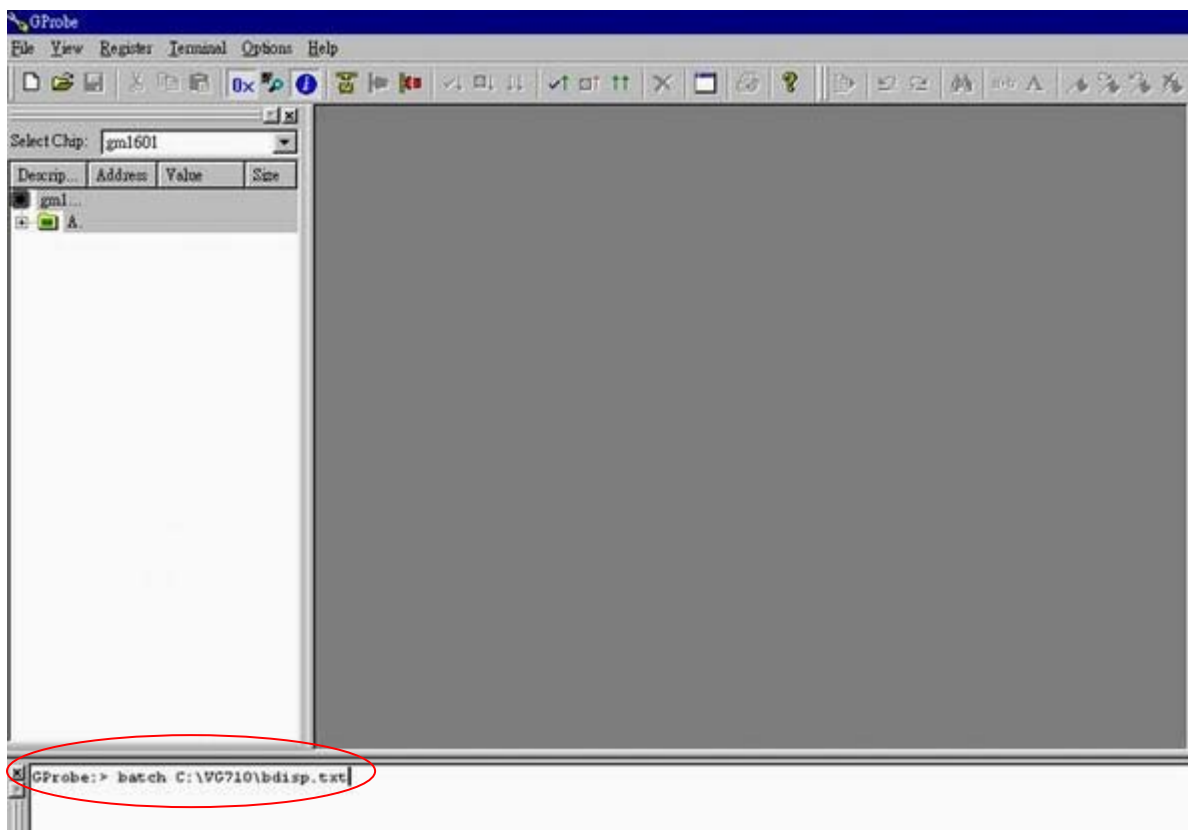
The screenshot displays the GProbe application interface. The main window features a menu bar (File, View, Register, Terminal, Options, Help) and a toolbar. A red circle highlights the 'Connection' icon in the toolbar. On the left, a 'Select Chip:' dropdown is set to 'gm1601', and a table lists components: 'gm1...' and 'A.'. A 'GProbe Connection Setup' dialog box is open in the center. It contains three sections: 'Select communication protocol...' with 'DDC2Bi3' selected; 'Select communication port...' with 'LPT1 (0x378)' selected; and 'Select communication speed...' with '70000' selected. Red circles highlight each of these three dropdown menus. The dialog has 'OK' and 'Cancel' buttons at the bottom. At the bottom of the main window, a status bar shows 'GProbe: >'.

Step 6. Before executing the firmware program, please test the connection between the monitor and fixtures. Key in “test” after “Gprobe,” and then press “Enter.”

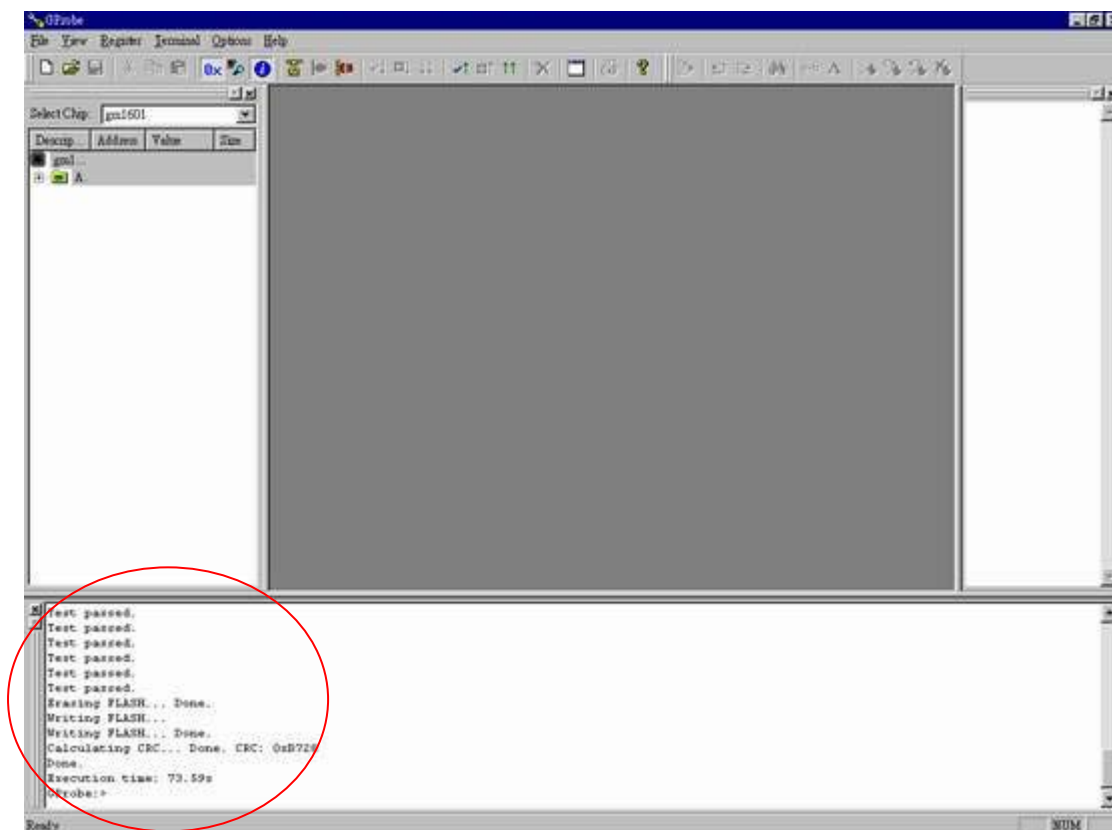


If the test result shows “passed,” it means the connection is well. If not (failed), it means the connection has problems. Then you need to check the setup procedure or reboot the PC, or simply use another PC to do the firmware upgrade.

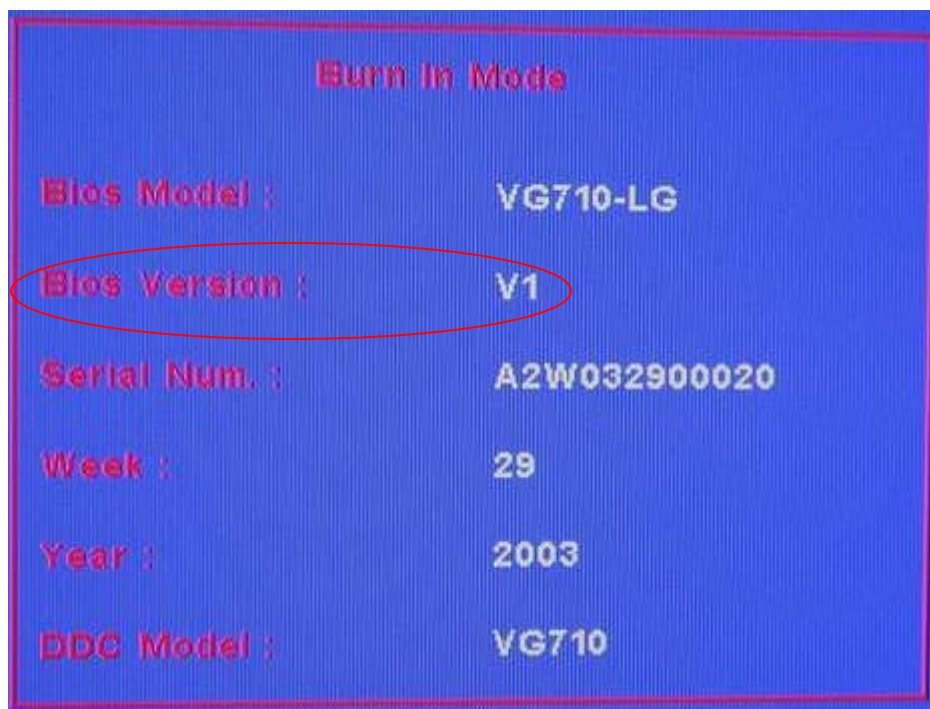
Step 7. Key in “batch C:\VG710\bdisp.txt” after “Gprobe:”, and then press “Enter” key to begin programming automatically.



Step 8. The successful picture is as follows:



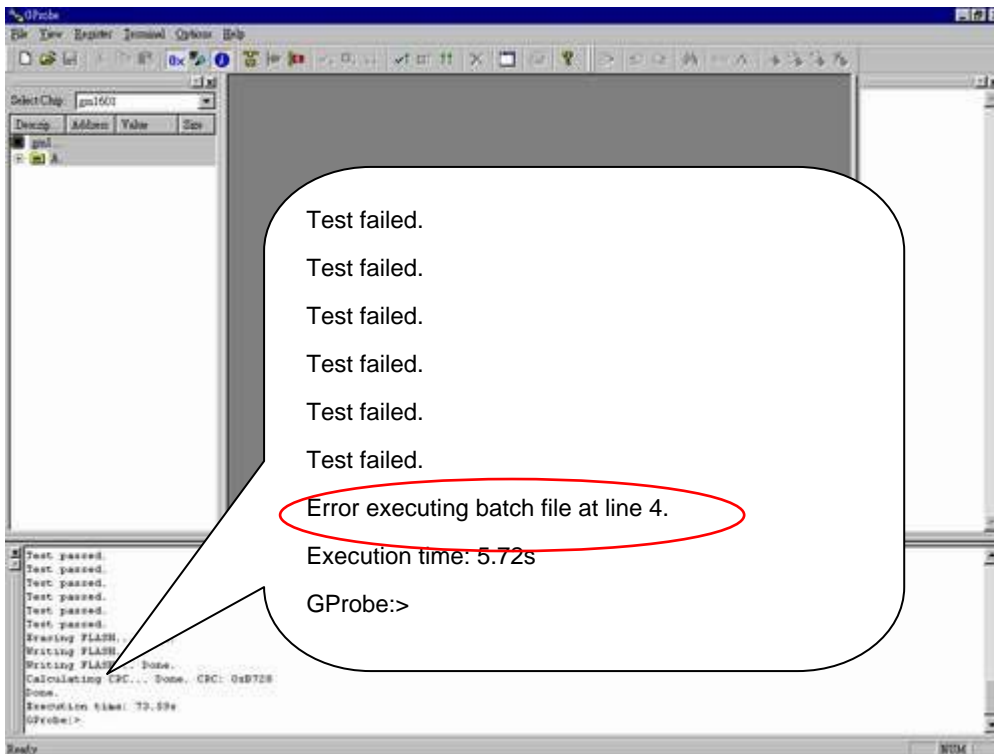
Step 9. Unplug and replug power cord of VG710 and then enter “Burn In Mode” (Refer to Chapter III-3. Hot Keys for Function Controls). Check if the version of BIOS is correct.



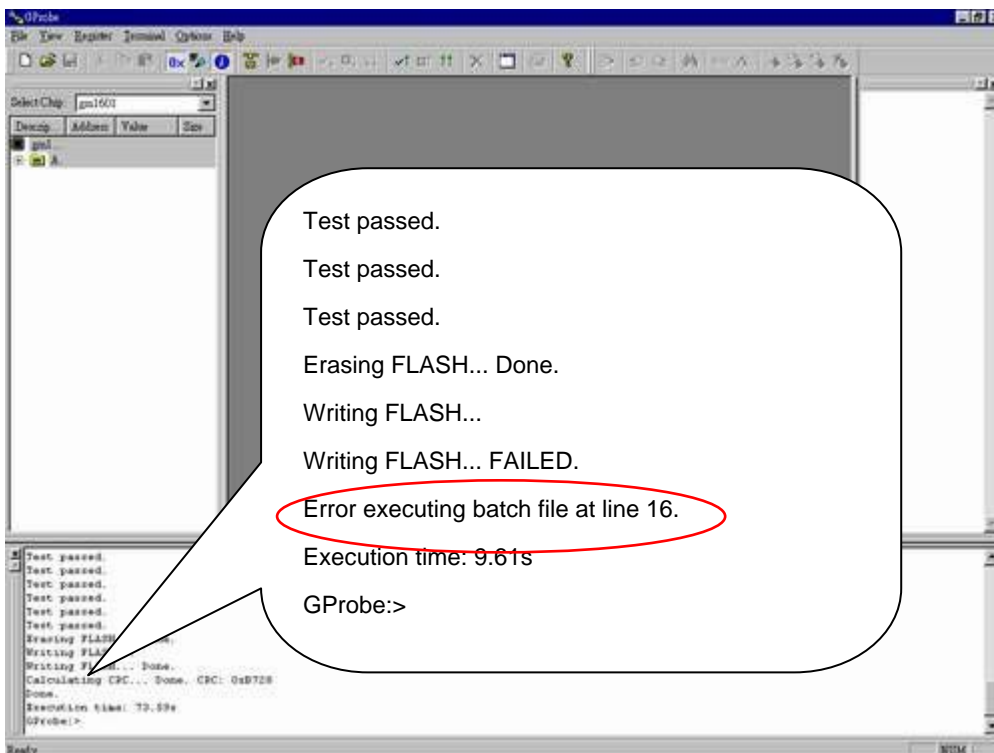
Step 10. At last, do “All Mode Reset.”

Troubleshooting:

1. If the firmware upgrade fails at the last step, **don't unplug the power cord of the monitor**. Just try the upgrade procedure again.
 - (a) If there is error to execute the command at or before line10 in the “bdisp.txt” batch file (for instance, the message “Error executing batch file at line 4” shows up in the Gprobe program (see the following picture)), please try to upgrade the firmware again.

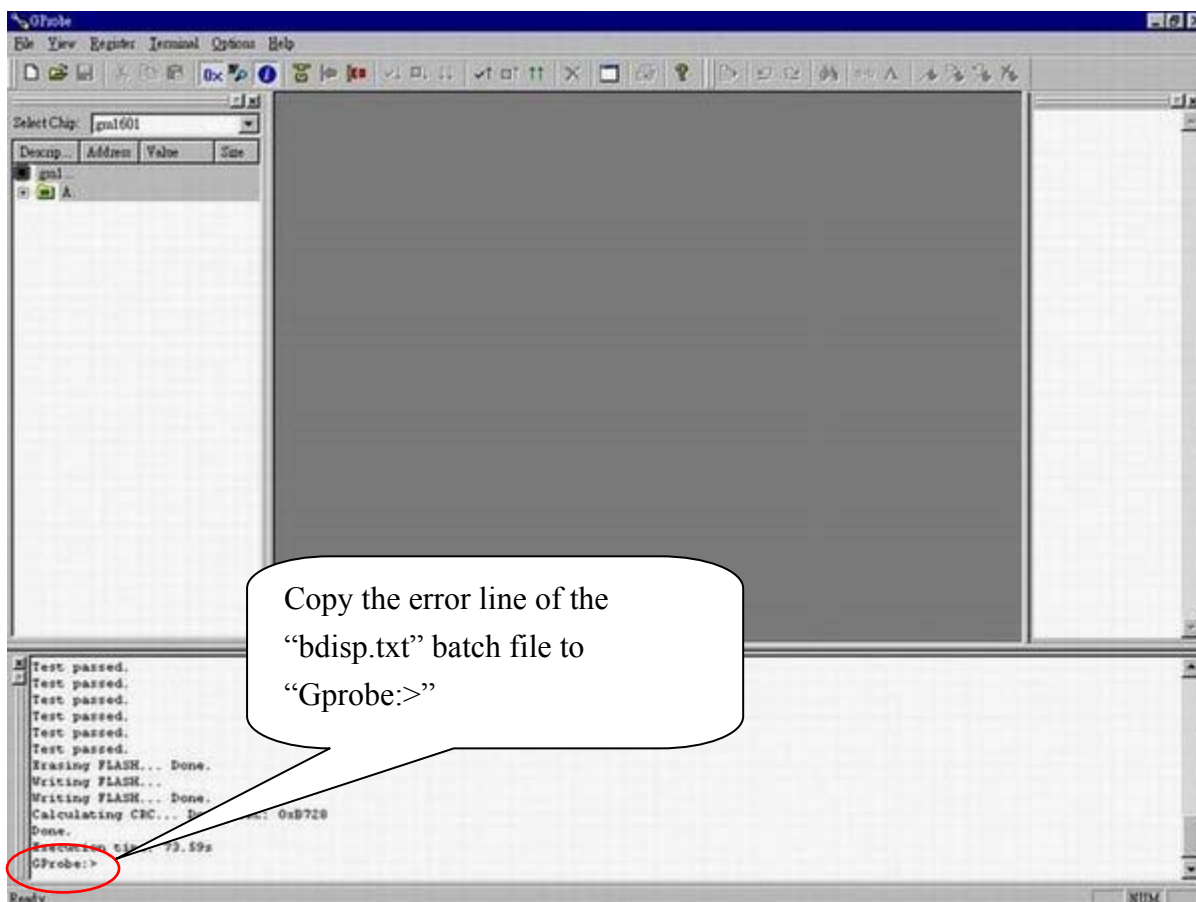


- (b) If there is error to execute the command at or after line11 in the “bdisp.txt” batch file, please copy the error line of the “bdisp.txt” batch file to “Gprobe:>” in the Gprobe program, and then press “Enter.” For example, there is “Error executing batch file at line 16” (see the following picture). Then you have to copy line 16 “FLASHWRITE C:\VG710\710LG_V2_48.bin” to “Gprobe:>” in the Gprobe program, and then press “Enter” (see the picture next page).




```
bdsp - 記事本
檔案(F) 編輯(E) 搜尋(S) 說明(H)

ECHO Starting...
Connect PROTOCOL=DDC2Bi3;PORT=LPT2;SPEED=60000
DebugOn
Test
ECHO Uploading FLASH driver...
SetBuffer 0xCC00 0x1000
NVRAMWrite C:\VG710\p204_205.bin
ECHO Done.
ECHO Resetting the board...
Reset
Connect PROTOCOL=DDC2Bi1;PORT=LPT2;SPEED=60000
DebugOn
Test
FLASHerase
ECHO Writing FLASH...
FLASHWrite C:\VG710\710LG_V2_48.bin
FLASHCRC 0 0
ECHO Done.
```



2. If the firmware upgrade still fails, reboot the PC, or simply use another PC to upgrade.
3. If the above procedures don't work, unplug and re-plug the power cord of the monitor. Then try to upgrade the

firmware again if the monitor can be powered on. **If the monitor cannot be turned on, that means the flash memory of the main board is out of work.** You then have to replace the main board.

3. DDC Key In Procedure

Note:

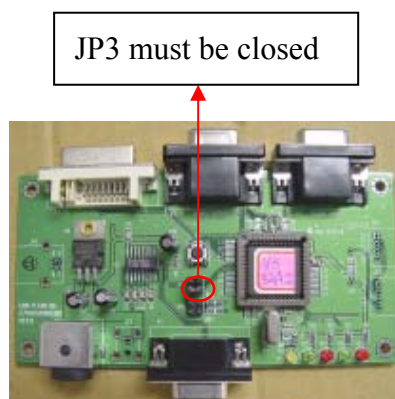
1. Every time after replacing the main board, you have to do the DDC key in.
2. If you find the DDC does not conform to the monitor, you have to do the DDC key in.

3.1 Equipment Needed

- VG710 Series Monitor
- Fixture (V3) for DDC Key in (JP3 must be closed)
- RS232 Cable (P/N: 42.55907.001) *1
- VGA Cable (P/N: 42.59901.003) *2
- DVI-DVI Cable *1 (P/N: 42.56108.012)
- PC (Personal Computer) with Win 98
- Power Adapter (P/N: 47.56001.501) *1 for Fixture
- DDC Key In Program
- One additional monitor for checking the program execution



PC



V3 Fixture



VG710



RS-232 Cable
(P/N: 42.55907.001)



DVI-DVI Cable
(P/N: 42.56108.012)



Power Adapter for Fixture
(P/N: 47.56001.501)



Barcode Reader



VGA Cable (P/N: 42.59901.003)

3.2 Setup Procedure

3.2.1 Connect P2 and P4 of Fixture with VGA ports of VG710 by VGA Cable.

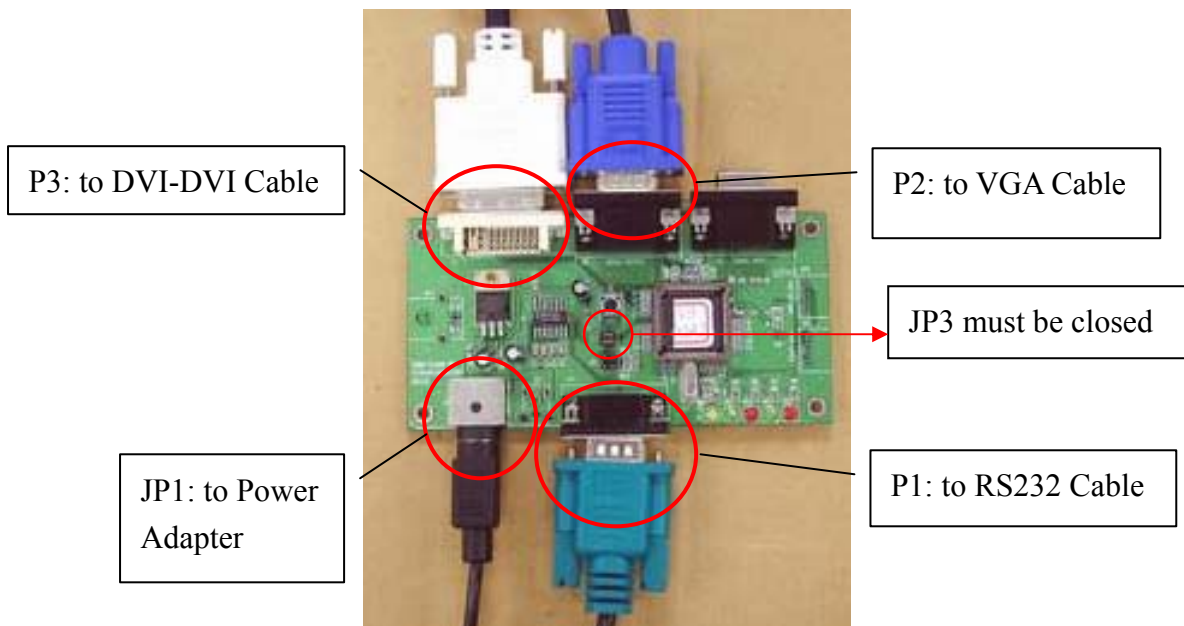
3.2.2 Connect P3 of Fixture with DVI port of VG710 by DVI-DVI Cable.

3.2.3 Connect P1 of Fixture with **COM1** of PC by RS-232 Cable.

3.2.4 Plug Power Adapter to Fixture.

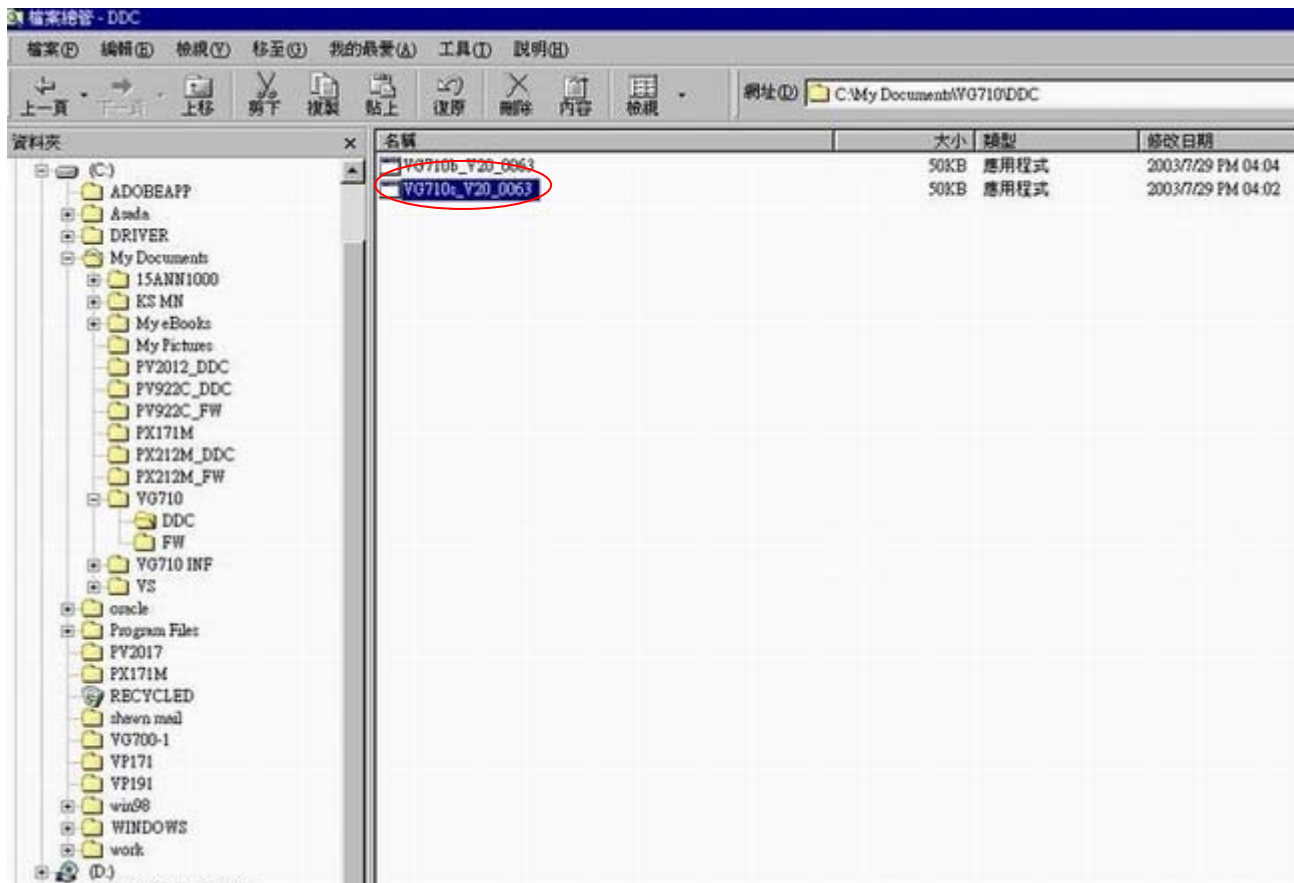
3.2.5 Connect Power Cord to VG710 Monitor.

3.2.6 Connect PC to the additional monitor.

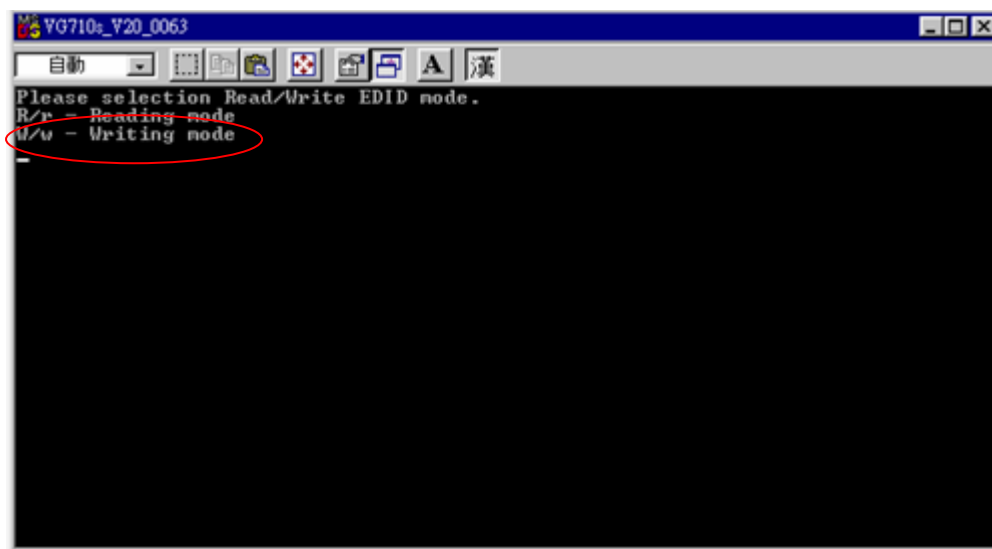


3.3 DDC Key In Procedure

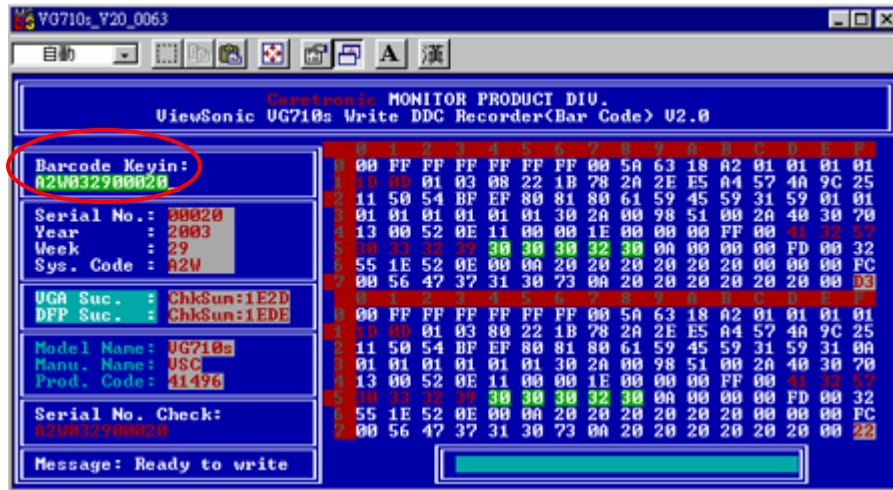
Step 1. Select and execute DDC Key In program.



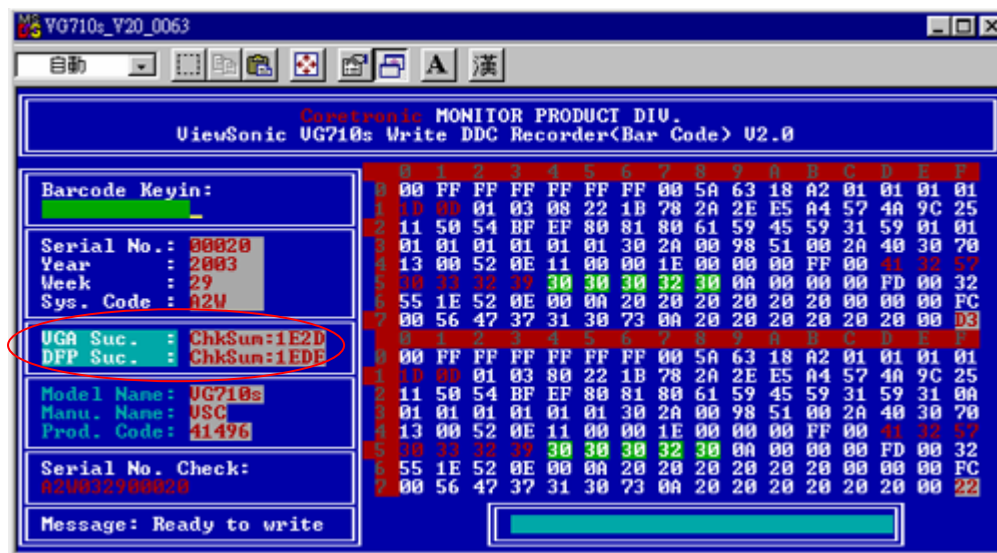
Step 2. Select "W/w - writing mode."



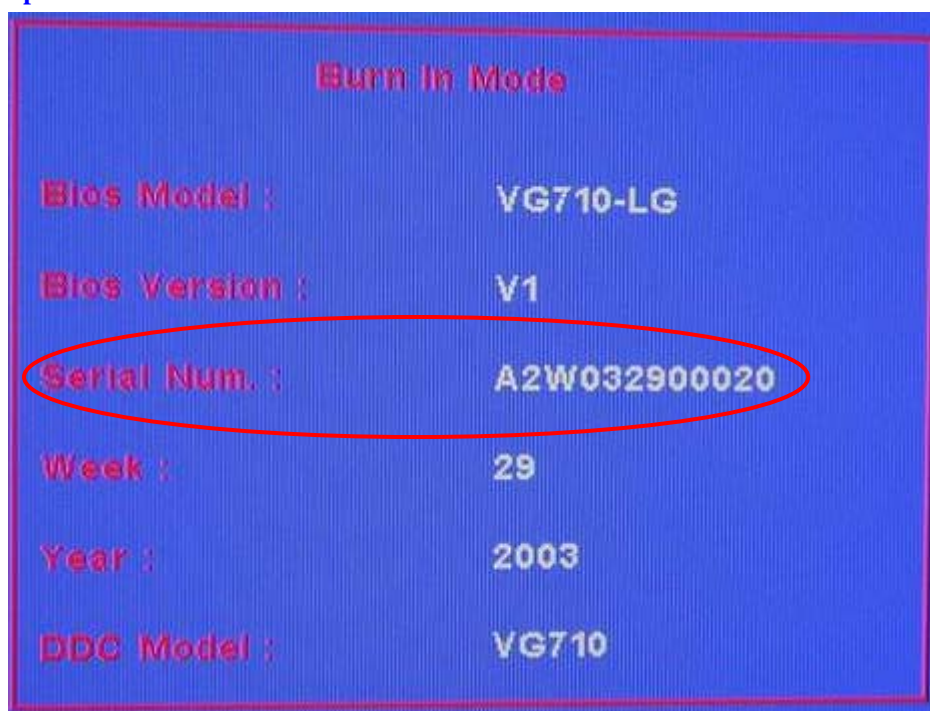
Step 3. Key in the serial number or use the barcode reader to scan the barcode of the monitor, and then press “Enter” key.



Step 4. The successful picture is as follows. “The checksum values will appear after DDC is upgraded successfully in both VGA and DFP (DVI) modes.”

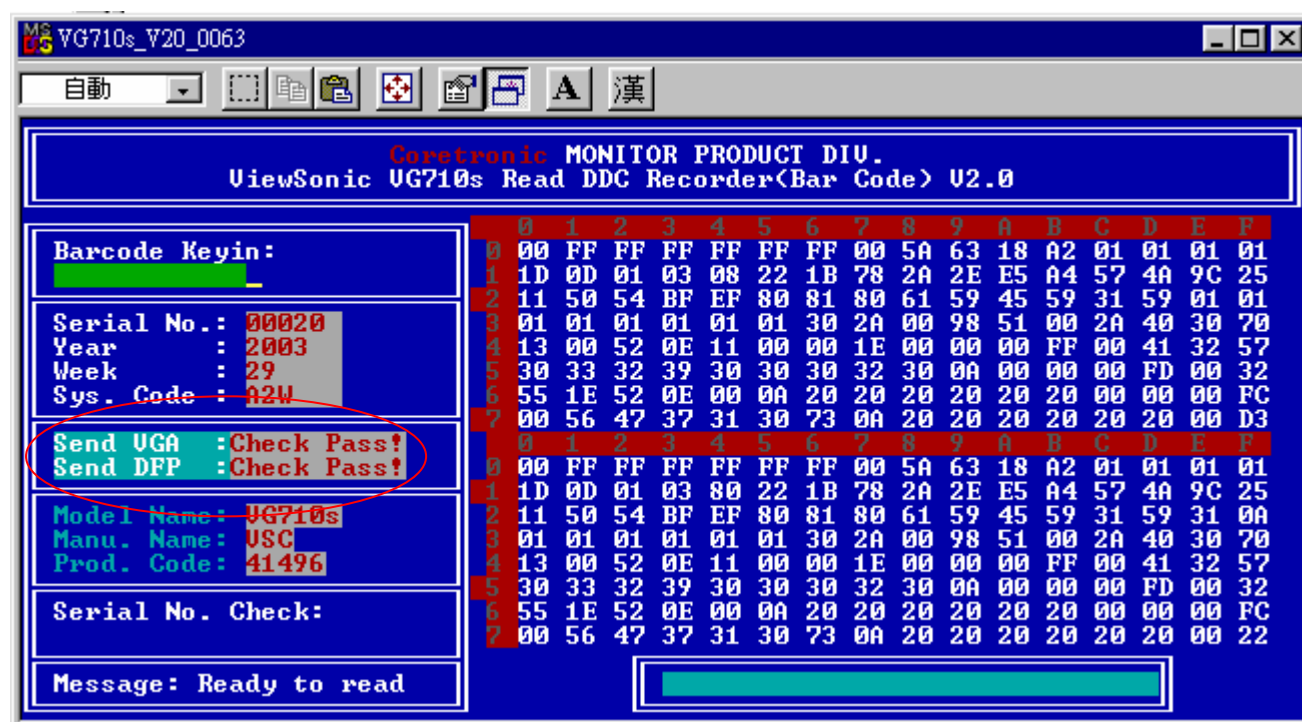


Step 5. Let VG710 enter “Burn In Mode” (Refer to Chapter III-3. Hot Keys for Function Controls). **Unplug and re-plug the power cord of the monitor.** The corrective serial number will show on the screen.



Step 6. Checking Method:

- Execute the DDC Key In program and select “R/r - Reading mode” in Step 2.
- Use barcode reader to scan the barcode of the monitor. If the DDC is correct, the “Send VGA” and “Send DFP” will show “Check Pass!” message.



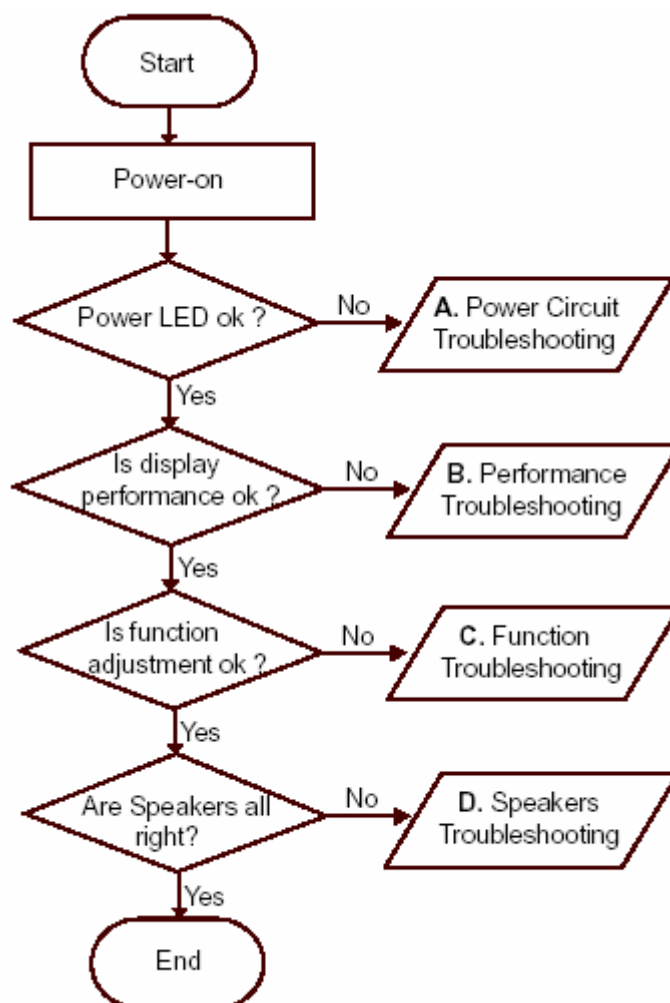
6. Trouble Shooting Flow Chart

This chapter provides technicians and people who have an electronic background a primary description about maintaining the product. Moreover, you can get the appropriate operation to solve some complicated problems of component repairing and professional problems.

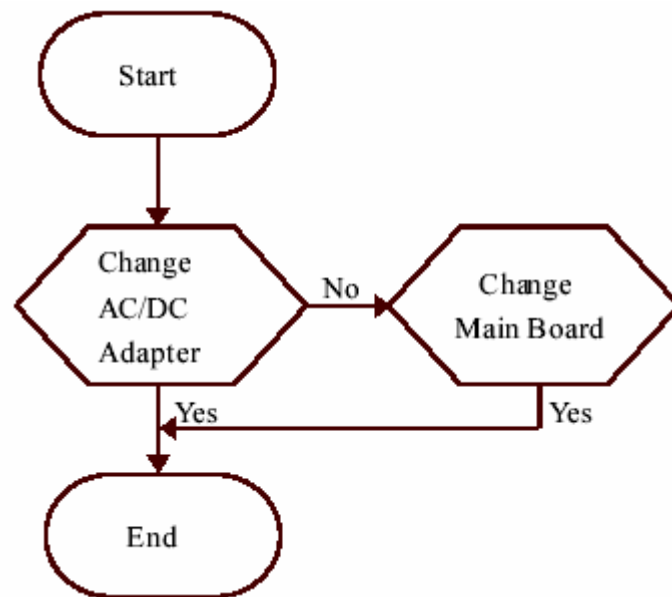
1. Equipment Needed

- VG710 Monitor
- Philips Screw Driver #101 and #107
- Electronic Hex Nut M5 mm
- PC (Personal Computer) with SXGA resolution and sound card / Pattern Generator

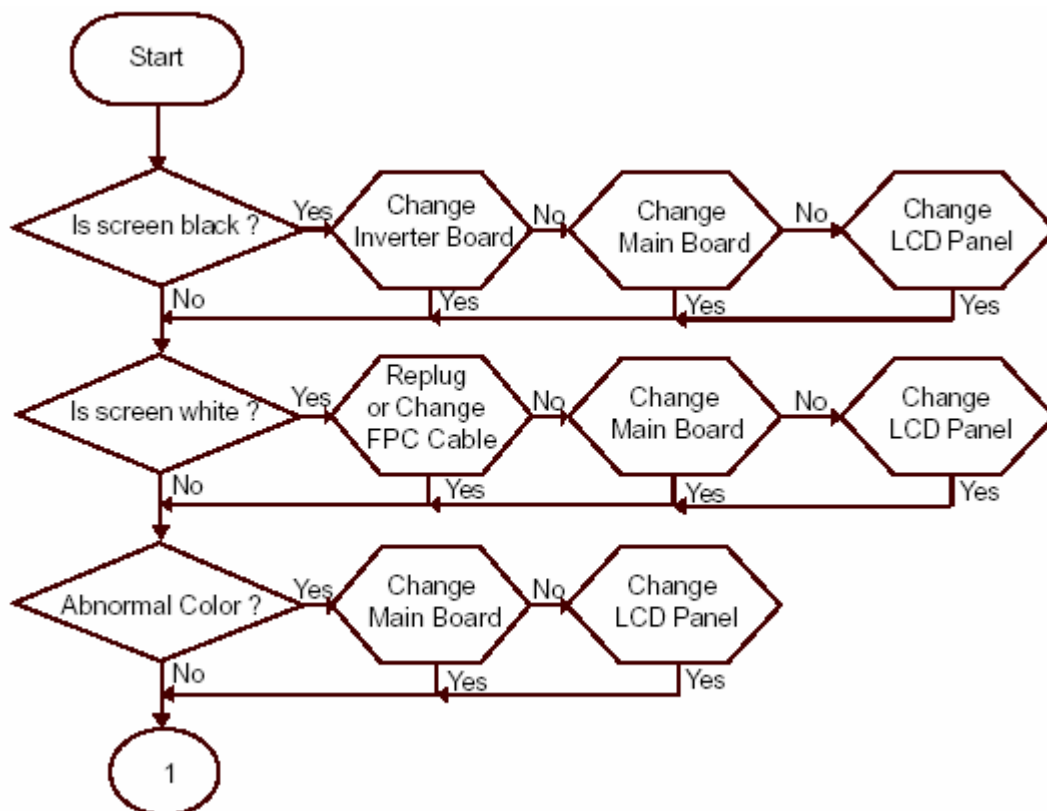
2. Main Procedure

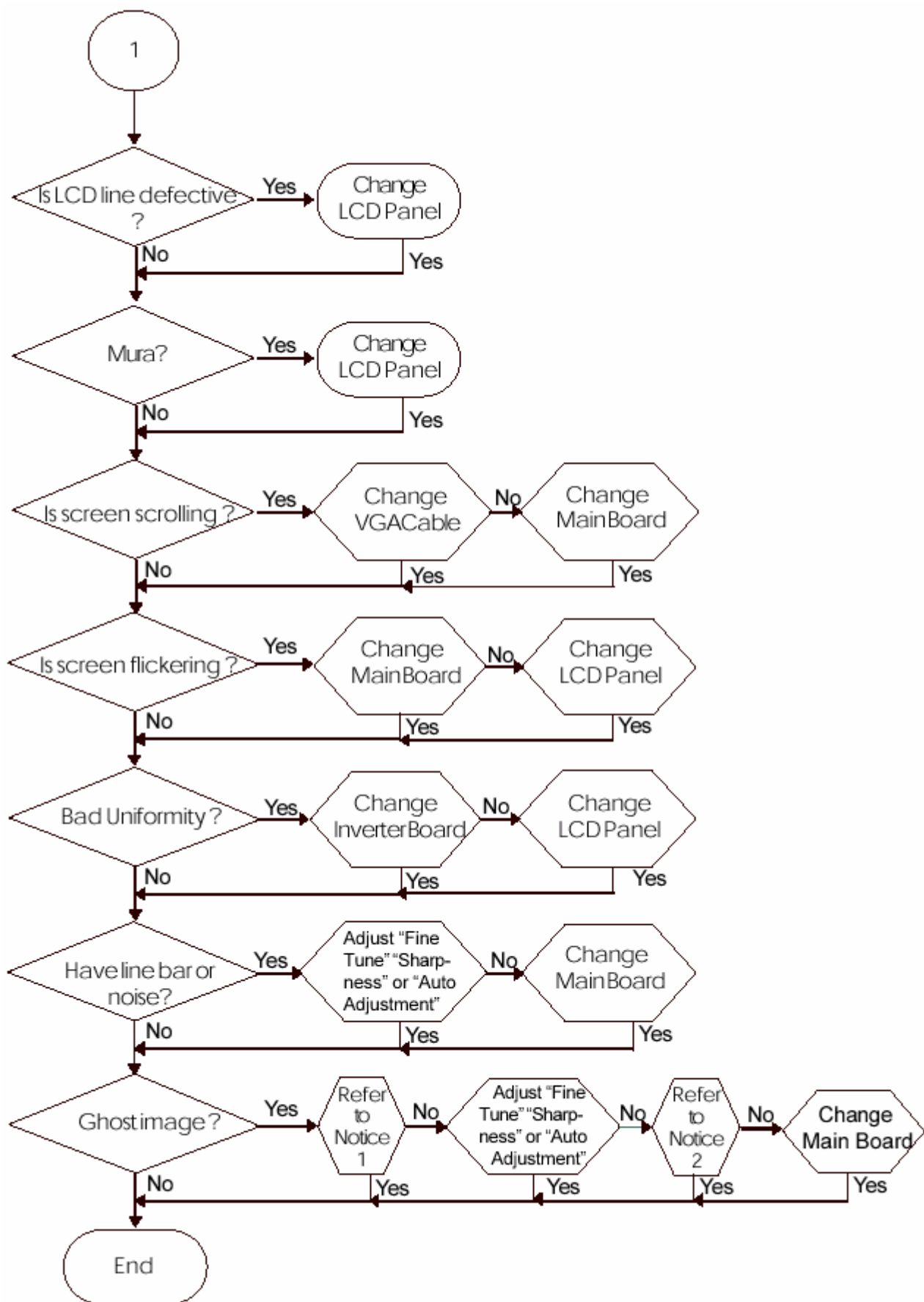


2.1 A. Power Circuit Troubleshooting



2.2 B. Performance Troubleshooting





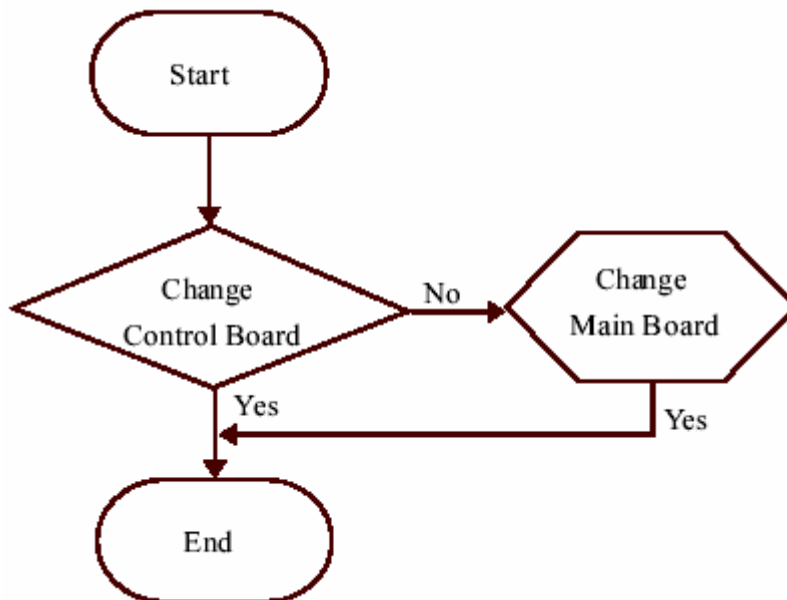
Notice:

1. Make sure VGA cable connected to PC directly, not via anything like "Data transfer" or "Distribution"After this

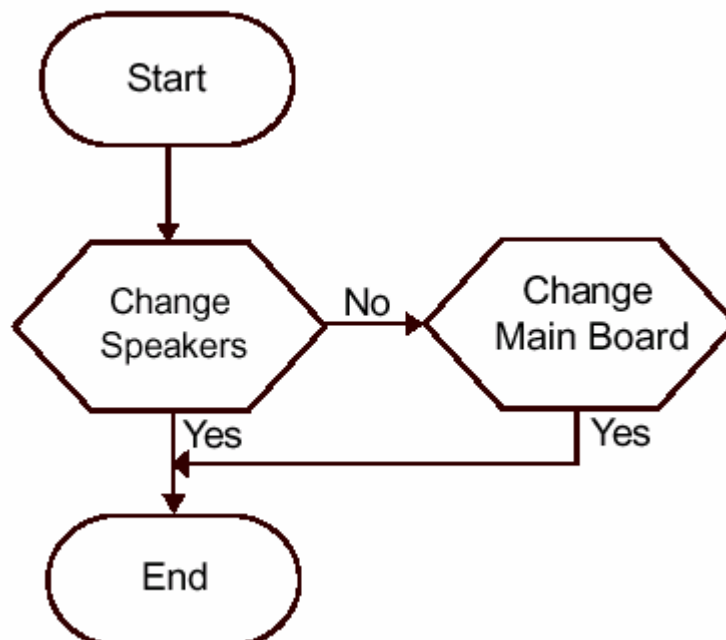
action if Ghost image disappears, go to “Yes”; else, go to “No.”

2. Check the compatibility on the computer. If it is compatibility problem, feedback the information to ViewSonic; else, go to “No.”

2.3 C. Function Troubleshooting



2.4 D. Speakers Troubleshooting



7. Recommended Spare Parts List

VG710b Recommended Spare Parts List

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|-----------------|--------------|--|----------------|------|
| 1 | M-LB-0813-0781 | 35.61203.001 | LABEL BAR CODE 50*25mm VP191 | BARCODE LABEL | 1 |
| 2 | M-LB-0813-0882 | 35.62701.002 | LABEL SPEC 120*50mm VG710b | SPEC LABEL | 1 |
| 3 | M-MS-0808-8946 | 35.62702.001 | BIRD LOGO AL E015-006 VG710s | LOGO | 1 |
| 4 | M-MS-0808-8947 | 35.62703.001 | COSMETIC STRIP ADHESIVE CS-VS06 140*21*0.3t | COMETIC STRIP | 1 |
| 5 | M-MS-0808-8948 | 35.62704.001 | ViewSonic AL-LOGO E015-016-1 ViewSonic | LOGO | 1 |
| 6 | A-CD-VG710B | 36.62701.002 | USER GUIDE+CD VG710b | USER GUIDE | 1 |
| 7 | M-MS-0808-8882 | 41.55601.001 | EMI Tape (80773) 20*40mm | EMI TAPE | 3 |
| 8 | M-MS-0808-8949 | 41.58301.001 | EMI TAPE 80773 25*75mm | EMI TAPE | 1 |
| 9 | M-MS-0808-8950 | 41.61603.001 | EMI GASKET 773GT W6*H6.5*L30 | EMI TAPE | 1 |
| 10 | M-WR-0828-0636 | 42.58301.001 | W.A. 10/6P UL1007 #24 100mm VG700(INV) | WIRE | 1 |
| 11 | M-WR-0828-6009 | 42.58302.005 | W.A. 30P UL20276 #28 200mm W/O CORE | WIRE | 1 |
| 12 | M-WR-0828-6010 | 42.58303.001 | W.A. 12P UL1571 #28 260mm W/O CORE SHARE(MB/CTRL) | WIRE | 1 |
| 13 | A-VC-0101-0261 | 42.59901.003 | CABLE VGA 15P 1800mm 2*25mm CORE | VGA CABLE | 1 |
| 14 | A-AU-0120-0032 | 42.59903.001 | CABLE AUDIO 1.8M LM/BK/LM VX2000 | AUDIO CABLE | 1 |
| 15 | B-SB-0221-0565 | 44.58402.001 | INVERTER PLCD2417414F;EMAX FOR 17" SAMSUNG | INVERTER | 1 |
| 16 | A-AD-0114-0204 | 47.62701.001 | ADAPTER IN100-240V 12V/3.33A;"LSE" | ADAPTER | 1 |
| 17 | M-LCD-0826-0178 | 48.61101.001 | TFT LCD 17" LG LM170E01-A5,SXGA | LCD PANEL | 1 |
| 18 | E-SK-0412-0080 | 49.62701.001 | SPEAKER 3W FOR VG710 | SPEAKER | 1 |
| 19 | M-MS-0808-8797 | 51.00014.002 | FILAMENT TAPE 3M NO.8915 25mm*55M | FILAMENT TAPE | |
| 20 | M-MS-0808-8951 | 51.58204.001 | PE BAG LDPE 420*600*0.07t W/HOLE FOR VG500 | PE BAG | 1 |
| 21 | M-MS-0808-8952 | 51.58314.001 | LCD PROTECT FILM 355*290*0.1t mm MYLAR VG700/VG750 | PROTECT FILM | 1 |
| 22 | M-MS-0808-8299 | 51.58711.002 | NAMEPLATE ELLIPSE CS-VS08 ViewSonic | NAMEPLATE | 1 |
| 23 | M-MS-0808-8953 | 51.59907.001 | WIRE MOUNT MC-03A "G&A" VX930 | WIRE MOUNT | 5 |
| 24 | M-MS-0808-8750 | 51.61103.001 | MYLAR ADHESIVEt=0.3mm VP171 | MYLAR | 1 |
| 25 | M-MS-0808-8954 | 51.62703.002 | HINGE CAP ABS HB-VS08 VG710b | HINGE CAP | 1 |
| 26 | M-CV-0830-2479 | 51.62706.002 | BASE COVER ABS HB-VS08 VG710b | BASE COVER | 1 |
| 27 | M-MS-0808-8955 | 51.62707.002 | FRONT ARM ABS HB-VS08 VG710b | FRONT ARM | 1 |
| 28 | M-MS-0808-8956 | 51.62708.002 | REAR ARM ABS HB-VS08 VG710b | REAR ARM | 1 |
| 29 | M-MS-0808-8957 | 51.62709.001 | MYLAR ADHESIVE 350*28*0.05t(BLACK) VG710s | MYLAR | 1 |
| 30 | M-MS-0808-8958 | 52.57503.001 | RUBBER FOOT 35*10*1.2t TFT8030 | RUBBER FOOT | 5 |
| 31 | M-MS-0808-8959 | 52.62701.002 | VESA RUBBER PAD D7.0*H4.5 VG710b | RUBBER PAD | 4 |
| 32 | P-BX-0601-0891 | 55.62701.002 | CARTON AB-18 455*205*480(h) VG710b | CARTON | 1 |
| 33 | P-FM-0602-0818 | 56.62701.001 | CUSHION R EPS VG710s | RIGHT CUSHION | 1 |
| 34 | P-FM-0602-0819 | 56.62702.001 | CUSHION L EPS VG710s | LEFT CUSHION | 1 |
| 35 | M-BK-0805-0020 | 61.61102.002 | SHIELDING BRKT-INV TINEPLATE 0.3t VG710s | SHIELDING BRKT | 1 |
| 36 | M-BK-0805-0021 | 61.62701.001 | LCD BRKT SECC 1.0t VG710s | LCD BRKT | 1 |
| 37 | M-BK-0805-0022 | 61.62702.001 | SHIELDING BRKT-MB SECC 1.0t VG710s | SHIELDING BRKT | 1 |
| 38 | M-MS-0808-8960 | 61.62703.001 | BASE PLATE SPCC-Zn 2.5t VG710s | BASE PLATE | 1 |
| 39 | M-MS-0808-8961 | 61.62704.001 | HINGE SPCC-Zn 2.0t VG710s | HINGE SPCC | 1 |
| 40 | C-FP-0301-0932 | 75.62701.002 | ASSY FRONT COVER CS-VS08 VG710b | FRONT COVER | 1 |
| 41 | C-BC-0302-0539 | 75.62702.002 | ASSY REAR COVER CS-VS08 VG710b | REAR COVER | 1 |
| 42 | B-MB-0201-0791 | 80.62701.001 | PCBA MAIN BD VG710 "GM5120" | MAIN BOARD | 1 |
| 43 | B-CB-0206-0165 | 80.62702.001 | PCBA CTRL BD VG710 | CONTROL BOARD | 1 |

VSA-M

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|--|------------|------|
| 1 | A-PC-0106-0271 | 42.50112.001 | CABLE POWER CORD 1830mm SP-023+IS14 EUR. | POWER CORD | 1 |
| 2 | A-PC-0106-0270 | 42.57207.001 | CABLE POWER CORD 1.8M±0.1M UNSHIELD (NA) | POWER CORD | 1 |

VSI-P

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|---|------------|------|
| 1 | A-PC-0106-0273 | 42.58204.001 | CABEL POWER CORD 1830mm PC TYPE COLOR:BLACK | POWER CORD | 1 |
| 2 | A-PC-0106-0270 | 42.57207.001 | CABLE POWER CORD 1.8M±0.1M UNSHIELD (NA) | POWER CORD | 1 |

VSCN-G

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|------------------------------------|------------|------|
| 1 | A-PC-0106-0187 | 42.50126.001 | CABLE POWER CORD 1.8M±0.1M (CHINA) | POWER CORD | 1 |

VG710s Recommended Spare Parts List

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|-----------------|--------------|--|----------------|------|
| 1 | M-LB-0813-0781 | 35.61203.001 | LABEL BAR CODE 50*25mm VP191 | BARCODE LABEL | 1 |
| 2 | M-LB-0813-0888 | 35.62701.001 | LABEL SPEC 120*50mm VG710s | SPEC LABEL | 1 |
| 3 | M-MS-0808-8946 | 35.62702.001 | BIRD LOGO AL E015-006 VG710s | LOGO | 1 |
| 4 | M-MS-0808-8947 | 35.62703.001 | COSMETIC STRIP ADHESIVE CS-VS06 140*21*0.3t | COMETIC STRIP | 1 |
| 5 | M-MS-0808-8948 | 35.62704.001 | ViewSonic AL-LOGO E015-016-1 ViewSonic | LOGO | 1 |
| 6 | A-CD-VG710S | 36.62701.001 | USER GUIDE+CD VG710s | USER GUIDE | 1 |
| 7 | M-MS-0808-8882 | 41.55601.001 | EMI Tape (80773) 20*40mm | EMI TAPE | 3 |
| 8 | M-MS-0808-8949 | 41.58301.001 | EMI TAPE 80773 25*75mm | EMI TAPE | 1 |
| 9 | M-MS-0808-8950 | 41.61603.001 | EMI GASKET 773GT W6*H6.5*L3C | EMI TAPE | 1 |
| 10 | M-WR-0828-0636 | 42.58301.001 | W.A. 10/6P UL1007 #24 100mm VG700(INV) | WIRE | 1 |
| 11 | M-WR-0828-6009 | 42.58302.005 | W.A. 30P UL20276 #28 200mm W/O CORE | WIRE | 1 |
| 12 | M-WR-0828-6010 | 42.58303.001 | W.A. 12P UL1571 #28 260mm W/O CORE SHARE(MB/CTRL) | WIRE | 1 |
| 13 | A-VC-0101-0261 | 42.59901.003 | CABLE VGA 15P 1800mm 2*25mm CORE | VGA CABLE | 1 |
| 14 | A-AU-0120-0032 | 42.59903.001 | CABLE AUDIO 1.8M LM/BK/LM VX2000 | AUDIO CABLE | 1 |
| 15 | B-SB-0221-0565 | 44.58402.001 | INVERTER PLCD2417414F;EMAX FOR 17" SAMSUNG | INVERTER | 1 |
| 16 | A-AD-0114-0204 | 47.62701.001 | ADAPTER IN100-240V 12V/3.33A;"LSE" | ADAPTER | 1 |
| 17 | M-LCD-0826-0178 | 48.61101.001 | TFT LCD 17" LG LM170E01-A5,SXGA | LCD PANEL | 1 |
| 18 | E-SK-0412-0080 | 49.62701.001 | SPEAKER 3W FOR VG710 | SPEAKER | 1 |
| 19 | M-MS-0808-8797 | 51.00014.002 | FILAMENT TAPE 3M NO.8915 25mm*55M | FILAMENT TAPE | |
| 20 | M-MS-0808-8951 | 51.58204.001 | PE BAG LDPE 420*600*0.07t W/HOLE FOR VG500 | PE BAG | 1 |
| 21 | M-MS-0808-8952 | 51.58314.001 | LCD PROTECT FILM 355*290*0.1t mm MYLAR VG700/VG750 | PROTECT FILM | 1 |
| 22 | M-MS-0808-8116 | 51.58711.001 | NAMEPLATE ELLIPSE ViewSonic | NAMEPLATE | 1 |
| 23 | M-MS-0808-8953 | 51.59907.001 | WIRE MOUNT MC-03A "G&A" VX930 | WIRE MOUNT | 5 |
| 24 | M-MS-0808-8750 | 51.61103.001 | MYLAR ADHESIVEt=0.3mm VP171 | MYLAR | 1 |
| 25 | M-MS-0808-8969 | 51.62703.001 | HINGE CAP ABS HB-VS06 VG710s | HINGE CAP | 1 |
| 26 | M-CV-0830-2780 | 51.62706.001 | BASE COVER ABS HB-VS06 VG710s | BASE COVER | 1 |
| 27 | M-MS-0808-8970 | 51.62707.001 | FRONT ARM ABS HB-VS06 VG710s | FRONT ARM | 1 |
| 28 | M-MS-0808-8971 | 51.62708.001 | REAR ARM ABS HB-VS06 VG710s | REAR ARM | 1 |
| 29 | M-MS-0808-8957 | 51.62709.001 | MYLAR ADHESIVE 350*28*0.05t(BLACK) VG710s | MYLAR | 1 |
| 30 | M-MS-0808-8958 | 52.57503.001 | RUBBER FOOT 35*10*1.2t TFT8030 | RUBBER FOOT | 5 |
| 31 | M-MS-0808-8972 | 52.62701.001 | VESA RUBBER PAD D7.0*H4.5 VG710s | RUBBER PAD | 4 |
| 32 | P-BX-0601-0895 | 55.62701.001 | CARTON AB-18 455*205*480(h) VG710s | CARTON | 1 |
| 33 | P-FM-0602-0818 | 56.62701.001 | CUSHION R EPS VG710s | RIGHT CUSHION | 1 |
| 34 | P-FM-0602-0819 | 56.62702.001 | CUSHION L EPS VG710s | LEFT CUSHION | 1 |
| 35 | M-BK-0805-0020 | 61.61102.002 | SHIELDING BRKT-INV TINEPLATE 0.3t VG710s | SHIELDING BRKT | 1 |
| 36 | M-BK-0805-0021 | 61.62701.001 | LCD BRKT SECC 1.0t VG710s | LCD BRKT | 1 |
| 37 | M-BK-0805-0022 | 61.62702.001 | SHIELDING BRKT-MB SECC 1.0t VG710s | SHIELDING BRKT | 1 |
| 38 | M-MS-0808-8960 | 61.62703.001 | BASE PLATE SPCC-Zn 2.5t VG710s | BASE PLATE | 1 |
| 39 | M-MS-0808-8961 | 61.62704.001 | HINGE SPCC-Zn 2.0t VG710s | HINGE SPCC | 1 |
| 40 | C-FP-0301-0936 | 75.62701.001 | ASSY FRONT COVER CS-VS07A VG710s | FRONT COVER | 1 |
| 41 | C-BC-0302-0540 | 75.62702.001 | ASSY REAR COVER CS-VS06 VG710s | REAR COVER | 1 |
| 42 | B-MB-0201-0791 | 80.62701.001 | PCBA MAIN BD VG710 "GM5120" | MAIN BOARD | 1 |
| 43 | B-CB-0206-0165 | 80.62702.001 | PCBA CTRL BD VG710 | CONTROL BOARD | 1 |

VSA-M

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|--|------------|------|
| 1 | A-PC-0106-0271 | 42.50112.001 | CABLE POWER CORD 1830mm SP-023+IS14 EUR. | POWER CORD | 1 |
| 2 | A-PC-0106-0270 | 42.57207.001 | CABLE POWER CORD 1.8M±0.1M UNSHIELD (NA) | POWER CORD | 1 |

VSI-P

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|---|------------|------|
| 1 | A-PC-0106-0273 | 42.58204.001 | CABEL POWER CORD 1830mm PC TYPE COLOR:BLACK | POWER CORD | 1 |
| 2 | A-PC-0106-0270 | 42.57207.001 | CABLE POWER CORD 1.8M±0.1M UNSHIELD (NA) | POWER CORD | 1 |

VSCN-G

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|------------------------------------|------------|------|
| 1 | A-PC-0106-0187 | 42.50126.001 | CABLE POWER CORD 1.8M±0.1M (CHINA) | POWER CORD | 1 |

VG710b BOM List

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|-------------------------------------|-------------|------|
| 1 | | DC.62701.003 | D.C. VG710b;LG CS-VS08 | | 1 |
| 2 | M-LB-0813-0882 | 35.62701.002 | LABEL SPEC 120*50mm VG710b | Spec Label | 1 |
| 3 | M-MS-0808-8299 | 51.58711.002 | NAMEPLATE ELLIPSE CS-VS08 ViewSonic | Nameplate | 1 |
| 4 | M-MS-0808-8954 | 51.62703.002 | HINGE CAP ABS HB-VS08 VG710b | Hing Cap | 1 |
| 5 | | 52.62701.002 | VESA RUBBER PAD VG710b | | 4 |
| 6 | | 70.62701.003 | ASSY DISPLAY CS-VS08 VG710b | | 1 |
| 7 | C-FP-0301-0932 | 75.62701.002 | ASSY FRONT COVER CS-VS08 VG710b | | 1 |
| 8 | | 51.62701.002 | FRONT COVER ABS HB-VS08A VG710b | Front cover | 1 |
| 9 | C-BC-0302-0539 | 75.62702.002 | ASSY REAR COVER CS-VS08 VG710b | | 1 |
| 10 | | 51.62702.002 | REAR COVER ABS HB-VS08 VG710b | Rear Cover | 1 |
| 11 | | 70.62702.002 | ASSY STAND CS-VS08 VG710b | | 1 |
| 12 | M-CV-0830-2479 | 51.62706.002 | BASE COVER ABS HB-VS08 VG710b | Base Cover | 1 |
| 13 | M-MS-0808-8955 | 51.62707.002 | FRONT ARM ABS HB-VS08 VG710b | Front Arm | 1 |
| 14 | M-MS-0808-8956 | 51.62708.002 | REAR ARM ABS HB-VS08 VG710b | Hng-C.R*4. | 1 |
| 15 | | DP.62702.00A | D.P. VG710b;LG CS-VS08,USA | | 1 |
| 16 | | 70.627DP.002 | COMMON PACKAGE CS-VS08 VG710b | | 1 |
| 17 | A-CD-VG710B | 36.62701.002 | USER GUIDE+CD VG710b | User Guide | 1 |
| 18 | P-BX-0601-0891 | 55.62701.002 | CARTON AB-18 455*205*480(h) VG710b | Carton | 1 |

VIEWSONIC INDIVIDUAL PARTS OF VSI-P

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|--|------------|------|
| 1 | A-PC-0106-0273 | 42.58204.001 | CABLE POWER CORD 1830mm PC TYPE C01 OR:BLACK | POWER CORD | 1 |
| 2 | A-PC-0106-0271 | 42.50112.001 | CABLE POWER CORD 1830mm SP-023+IS14 EUR. | POWER CORD | 1 |

VIEWSONIC INDIVIDUAL PARTS OF VSAU-A

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|--|-----------------|------|
| 1 | A-PC-0106-0271 | 42.50112.001 | CABLE POWER CORD 1830mm SP-023+IS14 EUR. | POWER CORD(EUR) | 1 |
| 2 | A-PC-0106-0270 | 42.57207.001 | CABLE POWER CORD 1.8M±0.1M UNSHIELD (NA) | POWER CORD(NA) | 1 |

VIEWSONIC INDIVIDUAL PARTS OF VSE-E

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|--|-----------------|------|
| 1 | A-PC-0106-0271 | 42.50112.001 | CABLE POWER CORD 1830mm SP-023+IS14 EUR. | POWER CORD(EUR) | 1 |
| 2 | A-PC-0106-0270 | 42.57207.001 | CABLE POWER CORD 1.8M±0.1M UNSHIELD (NA) | POWER CORD(NA) | 1 |

VIEWSONIC INDIVIDUAL PARTS OF VSCN-G

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|---|------------------|------|
| 1 | A-PC-0106-0187 | 42.50126.001 | CABLE POWER CORD 1.8M±0.1M (CHINA) | POWER CORD | 1 |
| 2 | M-MS-0808-8773 | 36.58307.002 | WARRANTY CARD S. CHINESE SECOND VERSION VIEWSONIC | WARRANTY CARD | 1 |
| 3 | M-LB-0813-0737 | 36.58308.001 | WARRANTY STICKER S. CHINESE | WARRANTY STICKER | 1 |
| 4 | M-LB-0813-0739 | 36.58309.001 | SHIPPING WARRANTY STICKER S. CHINESE VIEWSONIC | SHIPPING STICKER | 1 |
| 5 | | 51.58317.001 | PE BAG FOR CARTON | PE BAG | 1 |
| 6 | M-LB-0813-0736 | 35.58304.001 | Bar Code | Bar Code | 1 |

VG710s BOM List

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|-----------------|--------------|---|---|-------|
| 1 | | DC.62701.002 | D.C. VG710s;LG TWO-TONE | | 1 |
| 2 | | 35.00010.002 | LABEL CAUTION HIGH VOLTAGE 25.4*19mm | CAUTION LABEL | 1 |
| 3 | M-LB-0813-0736 | 35.58304.001 | LABEL BARCODE 40*14 ViewSonic | BAR CODE LABEL | 1 |
| 4 | M-LB-0813-0781 | 35.61203.001 | LABEL BAR CODE 50*25mm VP191 | BAR CODE LABEL | 1 |
| 5 | M-LB-0813-0888 | 35.62701.001 | LABEL SPEC 120*50mm VG710s | SPEC LABEL | 1 |
| 6 | M-MS-0808-8948 | 35.62704.001 | ViewSonic AL-LOGO E015-016-1 ViewSonic | BIRD LOGO | 1 |
| 7 | | 39.62702.001 | DDC RECORDER VG710s/b | | 1 |
| 8 | A-AD-0114-0204 | 47.62701.001 | ADAPTER IN100-240V 12V/3.33A;"LSE" | ADAPTER | 1 |
| 9 | M-MS-0808-8952 | 51.58314.001 | LCD PROTECT FILM 355*290*0.1t mm MYLAR VG70 | | 1 |
| 10 | M-MS-0808-8116 | 51.58711.001 | NAMEPLATE ELLIPSE ViewSonic | NAMEPLATE | 1 |
| 11 | M-MS-0808-8969 | 51.62703.001 | HINGE CAP ABS HB-VS06 VG710s | | 1 |
| 12 | M-MS-0808-8957 | 51.62709.001 | MYLAR ADHESIVE 350*30*0.05t(BLACK) VG710s | | 1 |
| 13 | | 70.62701.002 | ASSY DISPLAY LG TWO-TONE VG710s | | 1 |
| 14 | M-MS-0808-8946 | 35.62702.001 | BIRD LOGO AL E015-006 VG710s | BIRD LOGO | 1 |
| 15 | M-MS-0808-8947 | 35.62703.001 | COSMETIC STRIP ADHESIVE CS-VS06 140*21*0.3t | | 1 |
| 16 | M-MS-0808-8882 | 41.55601.001 | EMI Tape (80773) 20*40mm | | 3 |
| 17 | M-MS-0808-8949 | 41.58301.001 | EMI TAPE 80773 25*75mm | | 1 |
| 18 | M-MS-0808-8950 | 41.61603.001 | EMI GASKET 773GT W6*H6.5*L30 | | 1 |
| 19 | M-WR-0828-0636 | 42.58301.001 | W.A. 10/6P UL1007 #24 100mm VG700(INV) | INVERTER WIRE | 1 |
| 20 | M-WR-0828-6009 | 42.58302.005 | W.A. 30P UL20276 #28 200mm W/O CORE | PANEL WIRE | 1 |
| 21 | M-WR-0828-6010 | 42.58303.001 | W.A. 12P UL1571 #28 260mm W/O CORE SHARE(MB | CONTROL WIRE | 1 |
| 22 | B-SB-0221-0565 | 44.58402.001 | PCBA INVERTER PLCD2417414F:EMAX FOR 17" SAM | | 1 |
| 23 | M-LCD-0826-0178 | 48.61101.001 | TFT LCD 17" LG LM170E01-A5,SXGA | PANEL | 1 |
| 24 | E-SK-0412-0080 | 49.62701.001 | SPEAKER 3W FOR VG710 | SPEAKER | 1 |
| 25 | M-MS-0808-8797 | 51.00014.002 | FILAMENT TAPE 3M NO.8915 25mm*55M | | 0.001 |
| 26 | M-MS-0808-8953 | 51.59907.001 | WIRE MOUNT MC-03A "G&A" VX930 | | 5 |
| 27 | M-MS-0808-8750 | 51.61103.001 | MYLAR ADHESIVEt=0.3mm VP171 | | 1 |
| 28 | M-MS-0808-8957 | 51.62709.001 | MYLAR ADHESIVE 350*30*0.05t(BLACK) VG710s | | 1 |
| 29 | M-MS-0808-8972 | 52.62701.001 | VESA RUBBER PAD D7.0*H4.5 VG710s | | 4 |
| 30 | M-BK-0805-0020 | 61.61102.002 | SHIELDING BRKT-INV TINEPLATE 0.3t VG710s | | 1 |
| 31 | M-BK-0805-0021 | 61.62701.001 | LCD BRKT SECC 1.0t VG710s | | 1 |
| 32 | M-BK-0805-0022 | 61.62702.001 | SHIELDING BRKT-MB SECC 1.0t VG710s | | 1 |
| 33 | C-FP-0301-0936 | 75.62701.001 | ASSY FRONT COVER CS-VS07A VG710s | FRONT COVER | 1 |
| 34 | C-FP-0301-0937 | 51.62701.001 | FRONT COVER ABS HB-VS07A VG710s | | 1 |
| 35 | PL-BT-0706-0149 | 51.62704.001 | SELECT BUTTON ABS HB-Cr VG710s | | 1 |
| 36 | M-MS-0808-8973 | 51.62705.001 | LED LENS PMMA VG710s | | 1 |
| 37 | C-BC-0302-0540 | 75.62702.001 | ASSY REAR COVER CS-VS06 VG710s | REAR COVER | 1 |
| 38 | C-BC-0302-0541 | 51.62702.001 | REAR COVER ABS HB-VS06 VG710s | | 1 |
| 39 | M-BK-0805-0023 | 61.00042.001 | LOCK BRKT+CAP SECC 0.8t | | 1 |
| 40 | B-MB-0201-0791 | 80.62701.001 | PCBA MAIN BD VG710 "GM5120" | Main Board | 1 |
| 41 | | 00.58401.E01 | BARE PCB L:4 MAIN BD GM5120/GM2120 | | 1 |
| 42 | | 01.00034.501 | RES RP 0 5% 1/4W CHIP #1206 | R101. | 1 |
| 43 | | 01.00036.502 | RES RP 0 5% 1/16W CHIP #0603;"TA-I TECHNOLO | R51,R54, R6, R66,R67, R68, R85,R88, R95, R98, | 14 |
| 44 | | 01.00039.501 | RES RP 0 5% 1/10W CHIP #0805 | R100, R105, R116, R117. | 4 |
| 45 | | 01.10136.501 | RES RP 100 5% 1/16W #0603 | R110. R15, R16, R37, R38,R42, | 6 |
| 46 | | 01.10136.502 | RES RP 100 5% 1/16W X4 V8V 8P SMD | RP15, RP16. RP5,RP6, RP7, | 12 |
| 47 | | 01.10216.501 | RES RP 1K 1% 1/16W CHIP #0603 | R55. | 1 |
| 48 | | 01.10236.501 | RES RP 1K 5% 1/16W x4 V8V 8P SMD "PANAS | RP3, RP4. | 2 |
| 49 | | 01.10236.502 | RES RP 1K 5% 1/16W #0603;"TA-I TECHNOLOGY" | C13, R5, R75, R77. | 4 |
| 50 | | 01.10336.501 | RES RP 10K 5% 1/16W x4 V8V 8P SMD "PANASO | RP1, RP2. | 2 |
| 51 | | 01.10336.502 | RES RP 10K 5% 1/16W CHIP #0603;"TA-I TECHNO | R119, R12, R121. R17, R32,R49, R50, R56,R57, R58, | 16 |
| 52 | | 01.10339.501 | RES RP 10K 5% 1/10W CHIP #0805 | R1, R2. | 2 |
| 53 | | 01.10436.501 | RES RP 100K 5% 1/16W CHIP #0603 | R10. R9, | 2 |
| 54 | | 01.20116.501 | RES RP 200 1% 1/16W CHIP #0603 | R7. | 1 |
| 55 | | 01.22036.501 | RES RP 22 5% 1/16W CHIP #0603 | R18, R20, R22. | 3 |
| 56 | | 01.22236.501 | RES RP 2.2K 5% 1/16W CHIP #0603 | R82, | 7 |
| 57 | | 01.33036.501 | RES RP 33 5% 1/16W x4 V8V 8P SMD "PANASON | RP17. | 1 |
| 58 | | 01.33036.502 | RES RP 33 5% 1/16W CHIP #0603;"TA-I TECHNOL | R124, R125, R126. R40, R41,R52, R53, | 7 |
| 59 | | 01.33116.501 | RES RP 330 1% 1/16W CHIP #0603 | R28, R29, R3, R4. R8, | 5 |
| 60 | | 01.33336.501 | RES RP 33K 5% 1/16W CHIP #0603 | R80. | 1 |
| 61 | | 01.47236.501 | RES RP 4.7K 5% 1/16W CHIP #0603 | R13, R14. | 2 |
| 62 | | 01.56236.501 | RES RP 5.6K 5% 1/16W CHIP #0603 | R72. | 1 |
| 63 | | 01.68036.501 | RES RP 68 5% 1/16W CHIP #0603 | R45. | 1 |
| 64 | | 01.68336.501 | RES RP 68K 5% 1/16W CHIP 0603 | R76. | 1 |

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|---|---|------|
| 65 | | 01.75016.501 | RES RP 75 1% 1/16W CHIP #0603;"TA-I TECHNOL | R24, R25, R26. | 3 |
| 66 | | 01.75116.501 | RES RP 750 1% 1/16W CHIP #0603 | R11. | 1 |
| 67 | | 01.78216.501 | RES RP 7.87K 1% 1/16W CHIP #0603 | R78, R79. | 2 |
| 68 | | 02.10075.402 | CAP CE 10u 25V 20% 5*11mm 105 DEGREE C (PZ) | C114, C121, C124, | 3 |
| 69 | | 02.10174.404 | CAP CE 100u 20% 16V 6.3*11 RADIAL 105 degre | C100, C118, C12, C14, C174, C19, C22, C25,C77, C9, C90,C29, C32. C62, | 14 |
| 70 | | 02.10273.404 | CAP CE 1000u 10V 20% 10*16mm 105 (HF) LOW | C27. | 1 |
| 71 | | 02.10274.403 | CAP CE 1000u 16V 20% 10*20mm 105 (HD) LOW | C123, C5. | 2 |
| 72 | | 02.10547.102 | CAP CC 100pF 5% 50V NPO #0603 | C102, C165, C166, C167, C168, C186, C187. C89, | 8 |
| 73 | | 02.10747.101 | CAP CC 0.01uF 10% 50V X7R #0603;"YCTC""TEAM | C42,C43. C44, C45,C46, | 9 |
| 74 | | 02.10887.101 | CAP CC 0.1uF +80%-20% 50V Y5V #0603; "YCTC" | C11, C110, C111,C125, C126, C127,C128, C129, C130, C131, C132, C133, C134, C136,C137, C138, C139,C140, C141, C143, C144, C145, C146, C147, C148,C149, C150, C151,C152, C153, C154, C155, C156, C157, C158, C159,C16, C161, C162,C169, C171, C172. C175, C176, C18, C180, C181,C182, C183, C184,C198, C2, C202, C203, C21,C23, C24, C26,C28, C3, C33,C35, C37, C39, C40, C48,C49, C57, C63,C64, C65, C66,C67, C68, C69, C7, C70,C71, C72, C73,C74, C78, C79,C8, C80, C81, C82, | 107 |
| 75 | | 00.62701.A01 | BARE PCB L:2 CTRL BD VG710 | | 1 |
| 76 | | 02.10987.101 | CAP CC 1uF +80%-20% 16V Y5V #0603 | C115, C116, C117. | 3 |
| 77 | | 02.12174.401 | CAP CE 120uF 20% 16V LOW-ESR TYPE RC=405mA | C1. C20, | 2 |
| 78 | | 02.22447.101 | CAP CC 22pF 5% 50V NPO #0603; "YCTC";"TEAM | C192, C59, C60. C61, C75,C76, | 6 |
| 79 | | 02.33575.101 | CAP CC 330pF 8P4C 20% 25V #1206 "INPAQ" | CP13, CP14. | 2 |
| 80 | | 02.50347.101 | CAP CC 5pF 5% 50V NPO X7R #0603 | C103, C104. | 2 |
| 81 | | 03.00052.401 | INDCTOR BEAD MLB-160808-0600A-N1 SMD ; "MAG | L20, L21. | 2 |
| 82 | | 03.00072.401 | EMI Bead MLB-201209-0300A-N1 | L15, L17, L18, L19. L3, | 5 |
| 83 | | 03.00127.401 | INDCTR BEAD #0805 100MHz 30R MLB201209-0030 | R127, R128, R129. | 3 |
| 84 | | 03.15100.301 | INDCTR CHOKE 150uH 20% 3A DIP A0060D1 "ARON | L4. | 1 |
| 85 | | 03.22040.301 | INDCTR CHOKE COIL 22u 10% 3A DIP A00601C2 " | L1, L16, L5, L9. | 4 |
| 86 | | 07.14318.001 | XTAL 14.318MHz HC-49S HALF SIZE "鸿星" | X1. | 1 |
| 87 | | 08.2N390.402 | TRNSTR NPN GENERAL MMBT3904LT1 SOT-23 "MO | Q2, Q3. | 2 |
| 88 | | 08.2N390.603 | TRANSTR PNP GENERAL PURPOSE 2N3906 SST3 "RO | Q4. | 1 |
| 89 | | 09.1N414.802 | DIODE RLS4148 / PMLL4148L SMD "PHILIPS" | D13. | 1 |
| 90 | | 09.1N582.201 | DIODE IN5822 SCHOTTKY RECTIFIER DO201AD | D1. | 1 |
| 91 | | 09.DAN20.2K1 | DIODE ARRAY DAN202K SMD; "ROHM" | D2, D3. | 2 |
| 92 | | 09.LTL1B.ED1 | DIODE LED 3mm Yellow/Green LTL-1BEDJ | D1. | 1 |
| 93 | | 11.035F1.301 | CNNT F3P PWR JACK 2.54mm DIP 2DC-S005D100 | JP2. | 1 |
| 94 | | 11.042M2.306 | CNNT M 4P 2mm RT/LEAD TU2001WNR-04 "TYU" | JP10. | 1 |
| 95 | | 11.059F2.014 | CNNT PHONE JACK 5P ST/LEAD A71-5AYLT1 LIME(| JP9. | 1 |
| 96 | | 11.102M2.303 | CNNT 10P 2.0mm TU2001WNR-10 RT/DIP;"TYU" | JP3. | 1 |
| 97 | | 11.122M2.302 | CNNT M 12P 2mm RT/LEAD P-220-2*6-R | CON2. | 1 |
| 98 | | 11.122M2.303 | CNNT 12P 2.0mm TU2001WNR-12 RT/DIP;"TYU" | JP7. | 1 |
| 99 | | 11.155F2.203 | CNNT D-SUB 15P RT/LEAD BLUE PC99 VGA | JP6. | 1 |
| 100 | | 11.259F2.203 | CNNT DVI-D 25P RT/LEAD AMPHENOL G12A2031 | JP5. | 1 |
| 101 | | 11.302M2.301 | CNNT M 30P 2mm RT/LEAD P220-2*15-R ;"LCU" | JP11. | 1 |
| 102 | E-IC-0401-2771 | 20.24LC2.1A1 | IC CMOS 24LC21A EEPROM 128*8 BIT 8SOIC | U7, U8. | 2 |
| 103 | | 20.74LVC.141 | IC CMOS 74LVC14 INNERT SCHMITT-TR 14SOIC ; | U6. | 1 |
| 104 | | 20.AIC10.842 | IC AIC1084:(TO252) 5A ADJUSTABLE REGULATOR | U1, U3. | 2 |
| 105 | | 20.AN752.201 | IC AUDIO AN7522 DUAL 3-W AMPLIFIER | U12. | 1 |
| 106 | | 20.AP150.101 | IC AP1501 5V SWITCHING REGULATOR SMD 150KHz | U4. | 1 |
| 107 | | 20.GM512.001 | IC GM5120 Dual-Interface SXGA 208P PQFP "GE | U9. | 1 |
| 108 | | 20.SI230.4D1 | IC NMOS SI2304DS VISHAY SOT-23 | Q1. | 1 |
| 109 | | 20.THC63.LV1 | IC THC63LVDM83A 85MHZ LVDS TSSOP | U13, U14. | 2 |
| 110 | | 21.24LC1.601 | IC EEPROM 24LC16B/SN M 2K*8 BIT IIC BUS 8SO | U10. | 1 |
| 111 | | 21.Pm39L.V01 | IC Pm39LV010R CMOS Flash memory 1Megabit(12 | U11. | 1 |
| 112 | | 22.62701.001 | PROGRAMED IC VG710 | | 1 |
| 113 | | 35.00016.001 | LABEL BARCODE 6*38mm BLANK | | 1 |
| 114 | | 35.00017.001 | LABEL BIOS 13*11mm BLANK | | 1 |

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|-----------------|--------------|--|--|-------|
| 115 | | 35.00018.001 | LABEL BARCODE 13*26.5mm BLANK | | 2 |
| 116 | | 39.62701.001 | FW BIOS SOURCE CODE VG710 | | 1 |
| 117 | | 43.52102.002 | SWITCH PUSH PT-002-B2 DC12V 50mA | SW1, SW2, SW3, SW4, SW5,SW6, SW7, SW8. | 8 |
| 118 | | 61.00039.001 | EYELET BR φ3*4.0 | | 2 |
| 119 | | 61.59901.001 | SHIELDING PLATE DVI T-PLATE 0.3t | CN1. | 1 |
| 120 | B-CB-0206-0165 | 80.62702.001 | PCBA CTRL BD VG710 | CONTROL BOARD | 1 |
| 121 | M-MS-0808-6287 | 85.005AG.075 | SCREW HEX I/O #4-40*H5*L7.5 Ni NYLOK | B.L-DVI*2,B.L-VGA*2, | 4 |
| 122 | M-SCW-0824-0651 | 85.1F123.060 | SCREW PAN MECH W/SF M3*6 Ni | B.L-LCD*4,CTL-B.L*3,E.I-B.L*2,E.M- B.L*3,S.I-B.L*3,S.M-B.L*5, | 20 |
| 123 | M-SCW-0824-6753 | 85.4A323.040 | SCREW FLATE MECH M3*4 BLACK | S.M-B.L*2. | 2 |
| 124 | M-SCW-0824-6756 | 85.TA123.080 | SCREW CAP TAP M3*8 Ni | spk-c.f*4. | 4 |
| 125 | M-SCW-0824-6755 | 85.UA123.080 | DOUBLE THREADS SCREW PAN TAP M3*8 Ni | C.F-C.R*2. | 2 |
| 126 | | 70.62702.001 | ASSY STAND CS-VS06 VG710s | | 1 |
| 127 | M-CV-0830-2480 | 51.62706.001 | BASE COVER ABS HB-VS06 VG710s | | 1 |
| 128 | M-MS-0808-8970 | 51.62707.001 | FRONT ARM ABS HB-VS06 VG710s | | 1 |
| 129 | M-MS-0808-8971 | 51.62708.001 | REAR ARM ABS HB-VS06 VG710s | | 1 |
| 130 | M-MS-0808-8958 | 52.57503.001 | RUBBER FOOT 35*10*1.2t TFT8030 | | 5 |
| 131 | M-MS-0808-8960 | 61.62703.001 | BASE PLATE SPCC-Zn 2.5t VG710s | | 1 |
| 132 | M-MS-0808-8961 | 61.62704.001 | HINGE SPCC-Zn 2.0t VG710s | | 1 |
| 133 | M-SCW-0824-6757 | 85.1F124.120 | SCREW PAN MECH W/SF M4*12 Ni | Hng-C.R*4. | 4 |
| 134 | M-SCW-0824-6754 | 85.4A524.080 | SCREW FLAT MECH W/O M4*8 NYLOK | P.B-Hng*4. | 4 |
| 135 | M-SCW-0824-6755 | 85.UA123.080 | DOUBLE THREADS SCREW PAN TAP M3*8 Ni | Hng-A.R*1. | 1 |
| 136 | M-SCW-0824-0660 | 85.YA123.060 | SCREW FLAT TAP M3*6 Ni | P.B-C.B*4. | 4 |
| 137 | | DP.62701.00A | D.P. VG710s;AUO TWO-TONE,NA | | 1 |
| 138 | | 35.59906.001 | LABEL 210*65mm BLANK FOR PALLET | | 0.063 |
| 139 | A-PC-0106-0271 | 42.50112.001 | CABLE POWER CORD 1830mm SP-023+IS14 EUR. | | 1 |
| 140 | A-PC-0106-0270 | 42.57207.001 | CABLE POWER CORD 1.8M±0.1M UNSHIELD (NA) | | 1 |
| 141 | | 51.00069.001 | PACKING STRAP 12MM*2000M*0.6MM | | 0.023 |
| 142 | | 51.00070.001 | PE STRETCH FILM 500MM*1500M*0.02MM | | 3E-04 |
| 143 | | 51.00080.001 | 3 INCH TRANSPARENT ADHESIVE TAPE (600M) | | 0.002 |
| 144 | | 55.55103.001 | CORNER BOARD 40*40*5*1050mm | | 0.063 |
| 145 | | 55.57202.001 | CORNER BOARD 40*40*5*960mm | | 0.063 |
| 146 | | 55.57503.001 | CORNER BOARD 40*40*5*1700MM | | 0.125 |
| 147 | | 58.62701.001 | WOOD PALLET 1125*950*130 VG710s | | 0.031 |
| 148 | | 70.627DP.001 | COMMON PACKAGE TWO-TONE VG710s | | 1 |
| 149 | M-LB-0813-0706 | 35.58203.001 | LABEL CARTON 76*76mm | | 1 |
| 150 | A-CD-VG710S | 36.62701.001 | USER GUIDE+CD VG710s | | 1 |
| 151 | A-VC-0101-0261 | 42.59901.003 | CABLE VGA 15P 1800mm 2*25mm CORE | | 1 |
| 152 | A-AU-0120-0032 | 42.59903.001 | CABLE AUDIO 1.8M LM/BK/LM VX2000 | | 1 |
| 153 | M-MS-0808-8951 | 51.58204.001 | PE BAG LDPE 420*600*0.07t W/HOLE FOR VG500 | | 1 |
| 154 | P-BX-0601-0895 | 55.62701.001 | CARTON AB-18 455*205*480(h) VG710s | | 1 |
| 155 | P-FM-0602-0818 | 56.62701.001 | CUSHION R EPS VG710s | | 1 |
| 156 | P-FM-0602-0819 | 56.62702.001 | CUSHION L EPS VG710s | | 1 |

VG710s VIEWSONIC INDIVIDUAL PARTS OF VSI-P

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|--|------------|------|
| 1 | A-PC-0106-0273 | 42.58204.001 | CABLE POWER CORD 1830mm PC TYPE C01 OR:BLACK | POWER CORD | 1 |
| 2 | A-PC-0106-0271 | 42.50112.001 | CABLE POWER CORD 1830mm SP-023+IS14 EUR. | POWER CORD | 1 |

VIEWSONIC INDIVIDUAL PARTS OF VSCN-G

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|--|------------------|------|
| 1 | A-PC-0106-0187 | 42.50126.001 | CABLE POWER CORD 1.8M±0.1M (CHINA) | POWER CORD | 1 |
| 2 | M-MS-0808-8773 | 36.58307.002 | WARRANTY CARD S. CHINESE SECOND VERSION VIE | WARRANTY CARD | 1 |
| 3 | M-LB-0813-0737 | 36.58308.001 | WARRANTY STICKER S. CHINESE | WARRANTY STICKER | 1 |
| 4 | M-LB-0813-0739 | 36.58309.001 | SHIPPING WARRANTY STICKER S. CHINESE VIEWSON | SHIPPING STICKER | 1 |
| 5 | | 51.58317.001 | PE BAG FOR CARTON | PE BAG | 1 |
| 6 | M-LB-0813-0736 | 35.58304.001 | Bar Code | Bar Code | 1 |

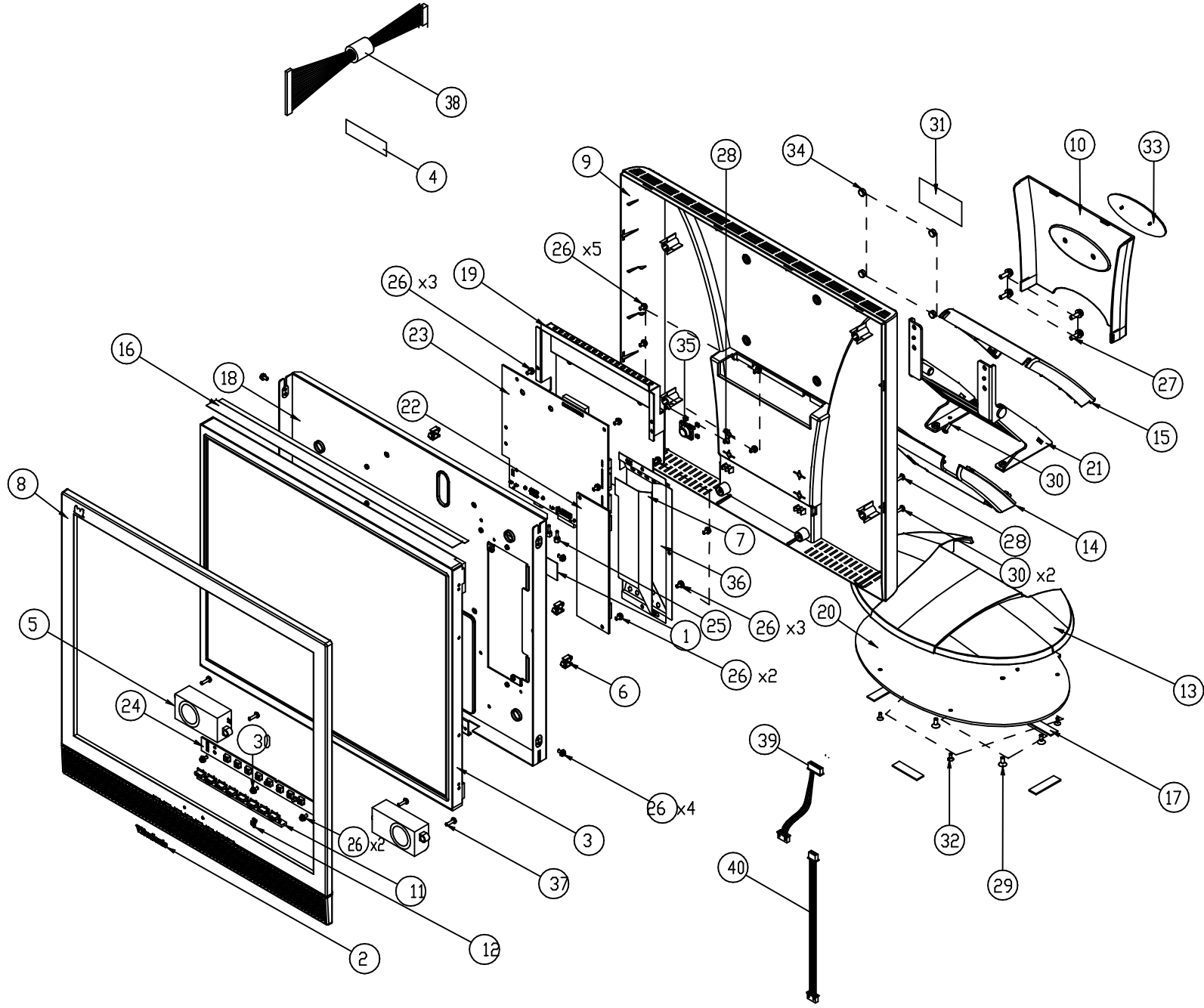
VIEWSONIC INDIVIDUAL PARTS OF VSAU-A

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|--|-----------------|------|
| 1 | A-PC-0106-0271 | 42.50112.001 | CABLE POWER CORD 1830mm SP-023+IS14 EUR. | POWER CORD(EUR) | 1 |
| 2 | A-PC-0106-0270 | 42.57207.001 | CABLE POWER CORD 1.8M±0.1M UNSHIELD (NA) | POWER CORD(NA) | 1 |

VIEWSONIC INDIVIDUAL PARTS OF VSE-E

| Item | ViewSonic P/N | Ref. P/N | Description | Location | Q'ty |
|------|----------------|--------------|--|-----------------|------|
| 1 | A-PC-0106-0271 | 42.50112.001 | CABLE POWER CORD 1830mm SP-023+IS14 EUR. | POWER CORD(EUR) | 1 |
| 2 | A-PC-0106-0270 | 42.57207.001 | CABLE POWER CORD 1.8M±0.1M UNSHIELD (NA) | POWER CORD(NA) | 1 |

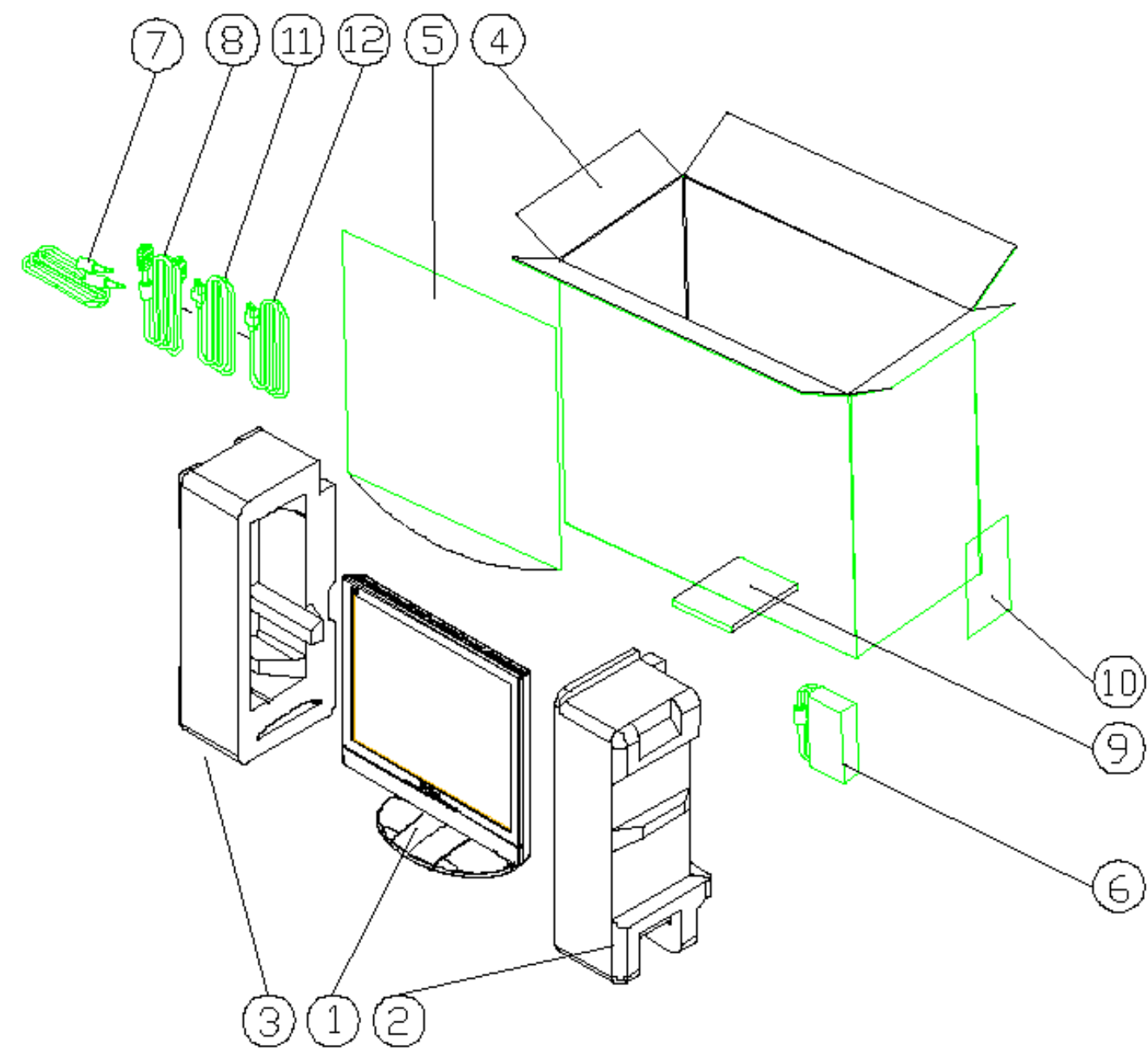
8. Exploded Diagram And Spare Parts List



ExplodedPartsList

| Item | ViewSonic P/N | Ref. P/N | Description | Q'TY |
|------|-----------------|--------------|---|--------|
| 1 | M-MS-0808-8947 | 35.62703.001 | COSMETIC STRIP ADHESIVE CS-VS06 140*21*0.3t | 1 |
| 2 | M-MS-0808-8948 | 35.62704.001 | ViewSonic AL-LOGO E015-016-1 ViewSonic | 1 |
| 3 | M-LCD-0826-0178 | 48.61101.001 | TFT LCD 17" LG LM170E01-A5,SXGA | 1 |
| 4 | M-MS-0808-8797 | 51.00014.002 | FILAMENT TAPE 3M NO.8915 25mm*55M | 0.0011 |
| 5 | E-SK-0412-0080 | 49.62701.001 | SPEAKER 3W FOR VG710 | 1 |
| 6 | M-MS-0808-8953 | 51.59907.001 | WIRE MOUNT MC-03A "G&A" VX930 | 5 |
| 7 | M-MS-0808-8750 | 51.61103.001 | MYLAR ADHESIVEt=0.3mm VP171 | 1 |
| 8 | C-FP-0301-0937 | 51.62701.001 | FRONT COVER ABS HB-VS07A VG710s | 1 |
| 9 | C-BC-0302-0541 | 51.62702.001 | REAR COVER ABS HB-VS06 VG710s | 1 |
| 10 | M-MS-0808-8969 | 51.62703.001 | HINGE CAP ABS HB-VS06 VG710s | 1 |
| 11 | PL-BT-0706-0149 | 51.62704.001 | SELECT BUTTON ABS HB-Cr VG710s | 1 |
| 12 | M-MS-0808-8973 | 51.62705.001 | LED LENS PMMA VG710s | 1 |
| 13 | M-CV-0830-2780 | 51.62706.001 | BASE COVER ABS HB-VS06 VG710s | 1 |
| 14 | M-MS-0808-8970 | 51.62707.001 | FRONT ARM ABS HB-VS06 VG710s | 1 |
| 15 | M-MS-0808-8971 | 51.62708.001 | REAR ARM ABS HB-VS06 VG710s | 1 |
| 16 | M-MS-0808-8957 | 51.62709.001 | MYLAR ADHESIVE 350*30*0.05t(BLACK) VG710s | 1 |
| 17 | M-MS-0808-8958 | 52.57503.001 | RUBBER FOOT 35*10*1.2t TFT8030 | 5 |
| 18 | M-BK-0805-0021 | 61.62701.001 | LCD BRKT SECC 1.0t VG710s | 1 |
| 19 | M-BK-0805-0022 | 61.62702.001 | SHIELDING BRKT-MB SECC 1.0t VG710s | 1 |
| 20 | M-MS-0808-8960 | 61.62703.001 | BASE PLATE SPCC-Zn 2.5t VG710s | 1 |
| 21 | M-MS-0808-8961 | 61.62704.001 | HINGE SPCC-Zn 2.0t VG710s | 1 |
| 22 | B-SB-0221-0565 | 44.58402.001 | PCBA INVERTER PLCD2417414F;EMAX FOR 17" SAM | 1 |
| 23 | B-MB-0201-0791 | 80.62701.001 | PCBA MAIN BD VG710 "GM5120" | 1 |
| 24 | B-CB-0206-0165 | 80.62702.001 | PCBA CTRL BD VG710 | 1 |
| 25 | M-MS-0808-6287 | 85.005AG.075 | SCREW HEX I/O #4-40*H5*L7.5 Ni NYLOK | 4 |
| 26 | M-SCW-0824-0651 | 85.1F123.060 | SCREW PAN MECH W/SF M3*6 Ni | 20 |
| 27 | M-SCW-0824-6757 | 85.1F124.120 | SCREW PAN MECH W/SF M4*12 Ni | 4 |
| 28 | M-SCW-0824-6753 | 85.4A323.040 | SCREW FLATE MECH M3*4 BLACK | 2 |
| 29 | M-SCW-0824-6754 | 85.4A524.080 | SCREW FLAT MECH W/O M4*8 NYLOK | 4 |
| 30 | M-SCW-0824-6755 | 85.UA123.080 | DOUBLE THREADS SCREW PAN TAP M3*8 Ni | 3 |
| 31 | M-LB-0813-0888 | 35.62701.001 | LABEL SPEC 120*50mm VG710s | 1 |
| 32 | M-SCW-0824-0660 | 85.YA123.060 | SCREW FLAT TAP M3*6 Ni | 4 |
| 33 | M-MS-0808-8116 | 51.58711.001 | NAMEPLATE ELLIPSE ViewSonic | 1 |
| 34 | M-MS-0808-8972 | 52.62701.001 | VESA RUBBER PAD D7.0*H4.5 VG710s | 4 |
| 35 | M-BK-0805-0023 | 61.00042.001 | LOCK BRKT+CAP SECC 0.8t | 1 |
| 36 | M-BK-0805-0020 | 61.61102.002 | SHIELDING BRKT-INV TINEPLATE 0.3t VG710s | 1 |
| 37 | M-SCW-0824-6756 | 85.TA123.080 | SCREW CAP TAP M3*8 Ni | 4 |
| 38 | M-WR-0828-6009 | 42.58302.005 | W.A. 30P UL20276 #28 200mm W/O CORE | 1 |
| 39 | M-WR-0828-0636 | 42.58301.001 | W.A. 10/6P UL1007 #24 100mm VG700(INV) | 1 |
| 40 | M-WR-0828-6010 | 42.58303.001 | W.A. 12P UL1571 #28 260mm W/O CORE SHARE(MB | 1 |

Packing for shipping



VG710 b/s packaging Part List

| Item | ViewSonic P/N | Ref. P/N | Description | Q'TY |
|------|----------------|--------------|--|------|
| 1 | #N/A | DC.62701.002 | D.C. VG710s;LG TWO-TONE | 1 |
| 2 | P-FM-0602-0818 | 56.62701.001 | CUSHION R EPS VG710s | 1 |
| 3 | P-FM-0602-0819 | 56.62702.001 | CUSHION L EPS VG710s | 1 |
| 4 | P-BX-0601-0895 | 55.62701.001 | CARTON AB-18 455*205*480(h) VG710s | 1 |
| 4_1 | P-BX-0601-0891 | 55.62701.002 | CARTON AB-18 455*205*480(h) VG710b | 1 |
| 5 | M-MS-0808-8951 | 51.58204.001 | PE BAG LDPE 420*600*0.07t W/HOLE FOR VG500 | 1 |
| 6 | A-AD-0114-0204 | 47.62701.001 | ADAPTER IN100-240V 12V/3.33A;"LSE" | 1 |
| 7 | A-AU-0120-0032 | 42.59903.001 | CABLE AUDIO 1.8M LM/BK/LM VX2000 | 1 |
| 8 | A-VC-0101-0261 | 42.59901.003 | CABLE VGA 15P 1800mm 2*25mm CORE | 1 |
| 9 | A-CD-VG710S | 36.62701.001 | USER GUIDE+CD VG710s | 1 |
| 9_1 | A-CD-VG710B | 36.62701.002 | USER GUIDE+CD VG710b | 1 |
| 10 | M-LB-0813-0706 | 35.58203.001 | LABEL CARTON 76*76mm | 1 |
| 11 | A-PC-0106-0270 | 42.57207.001 | CABLE POWER CORD 1.8M±0.1M UNSHIELD (NA) | 1 |
| 12 | A-PC-0106-0271 | 42.50112.001 | CABLE POWER CORD 1830mm SP-023+IS14 EUR. | 1 |

Packing For Shipping

1. Packing Procedure

1.1 Paste protection film to protect the monitor. (Figure 1)

1.2 Put the monitor in the PE bag and seal the bag with tape. (Figure 2)



Figure 1



Figure 2

1.3 Put the cushions on the monitor. (Figure 3)

1.4 Place the monitor into the carton and then put all the accessories into the carton. At last, close the carton and seal it with tape. (Figure 4)



Figure 3

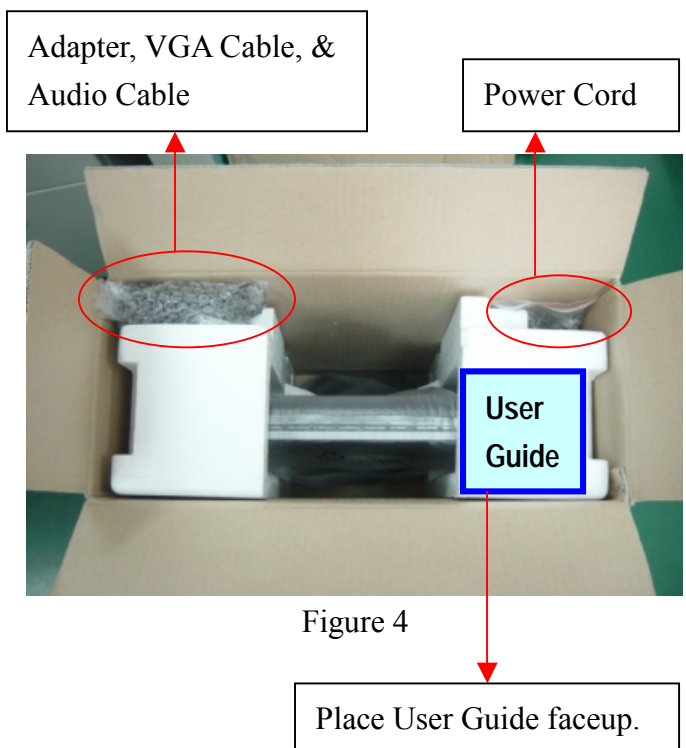
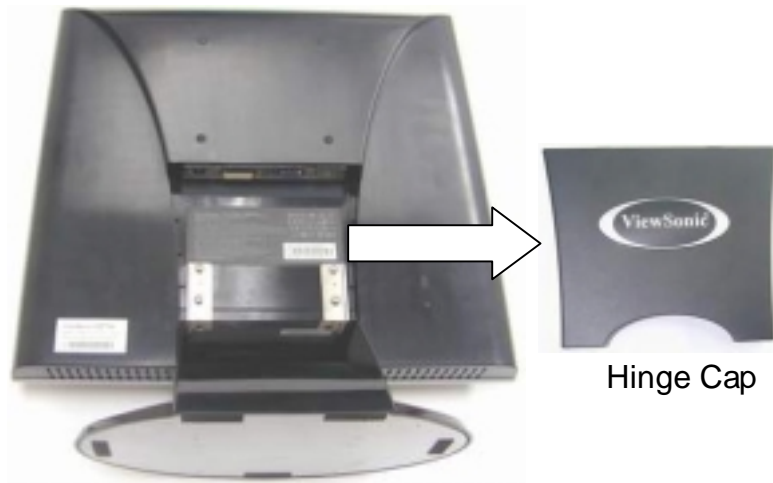


Figure 4

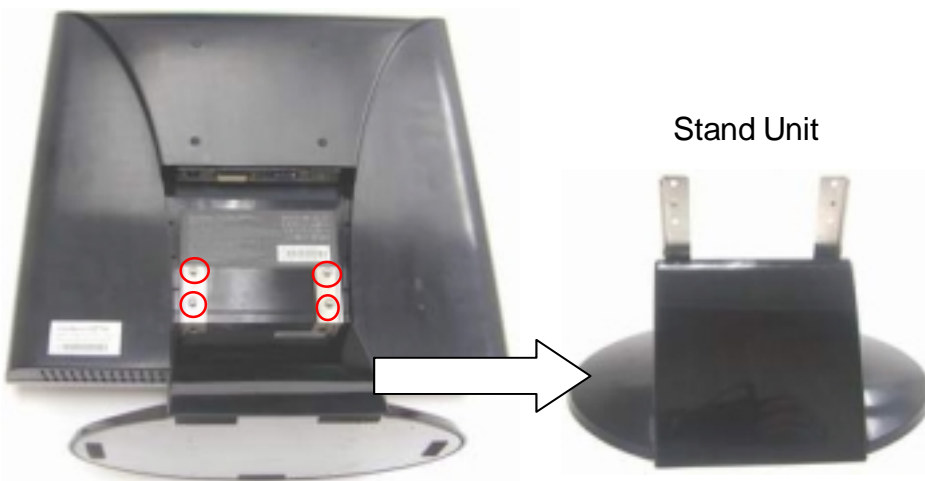
Disassembly Procedure

1. Disassemble Stand Unit

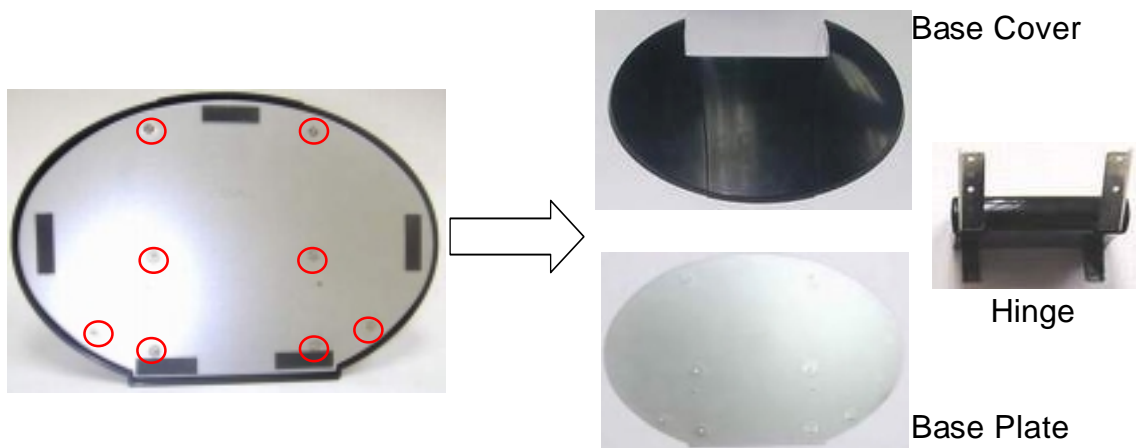
1.1 Lay VG710 Monitor face down to detach Hinge Cap.



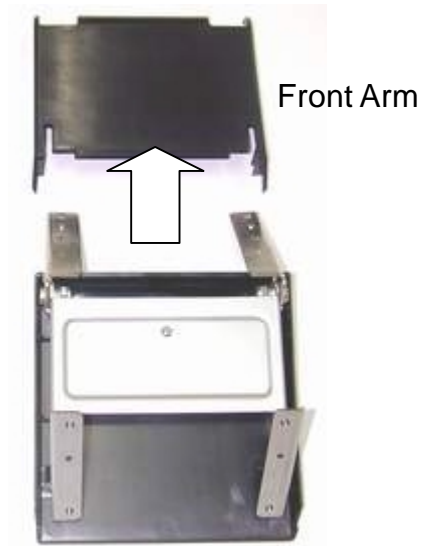
1.2 Unscrew four screws to remove Stand Unit.



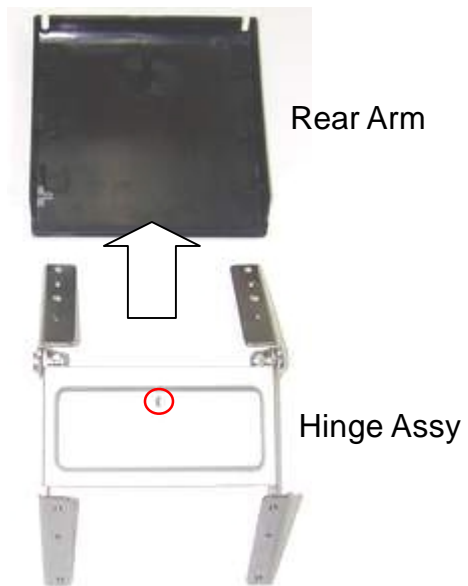
1.3 Unscrew eight screws to remove Base Cover, Base Plate, and Hinge.



1.4 Use a screw driver (-) to lift up Front Arm.

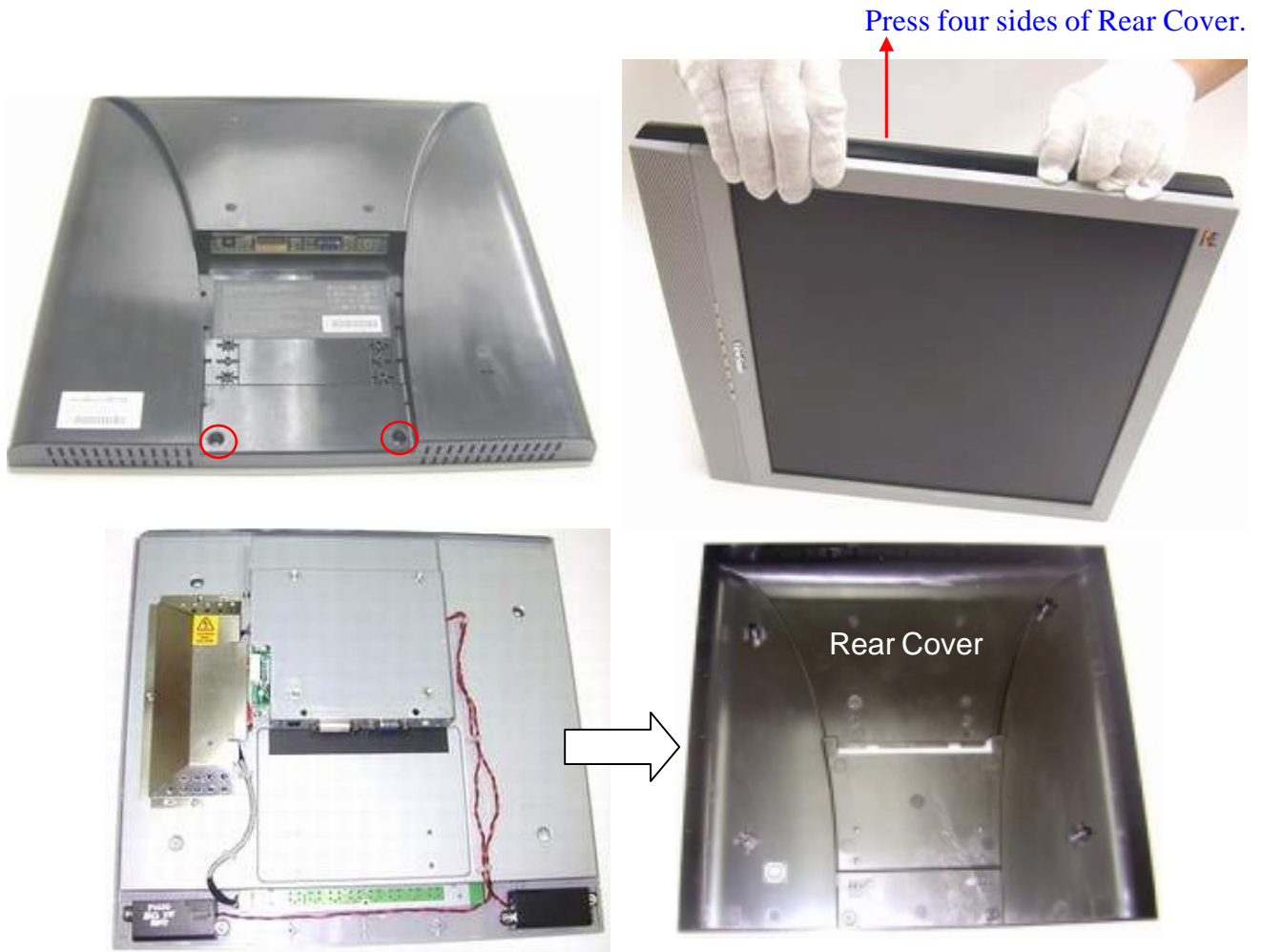


1.5 Unscrew one screw to remove Rear Arm.

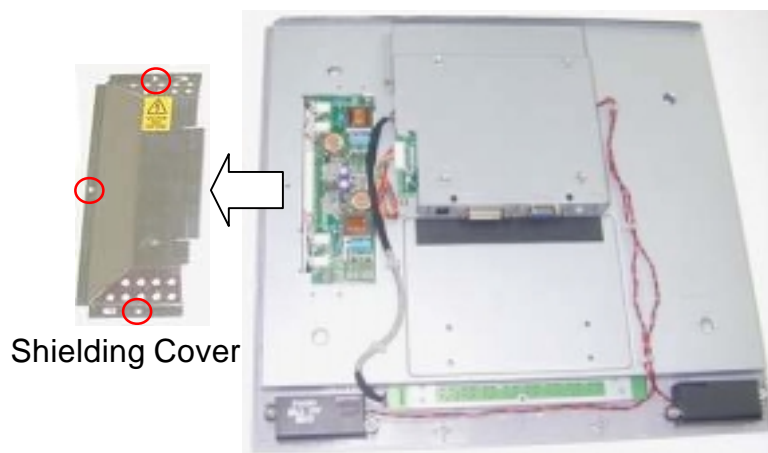


2. Removing Inverter Board, Main Board, and Speaker Module

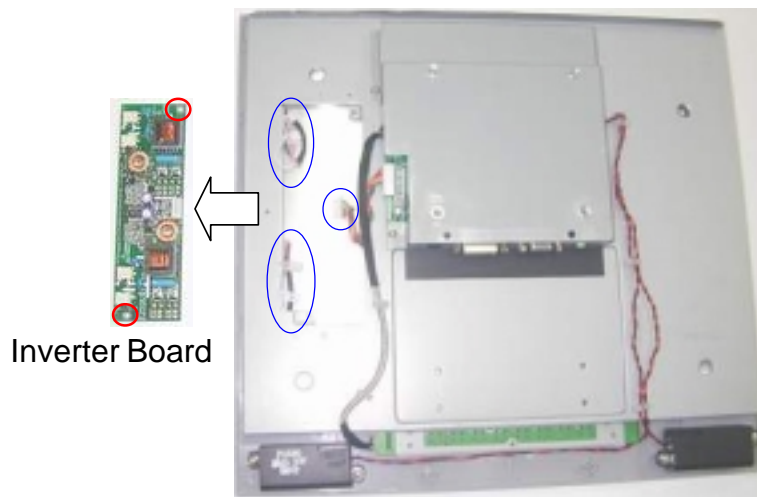
- 2.1 Unscrew 2 screws on the rear side of the monitor. Press four sides of Rear Cover to loosen the tenons inside, and then the Rear Cover can be removed.



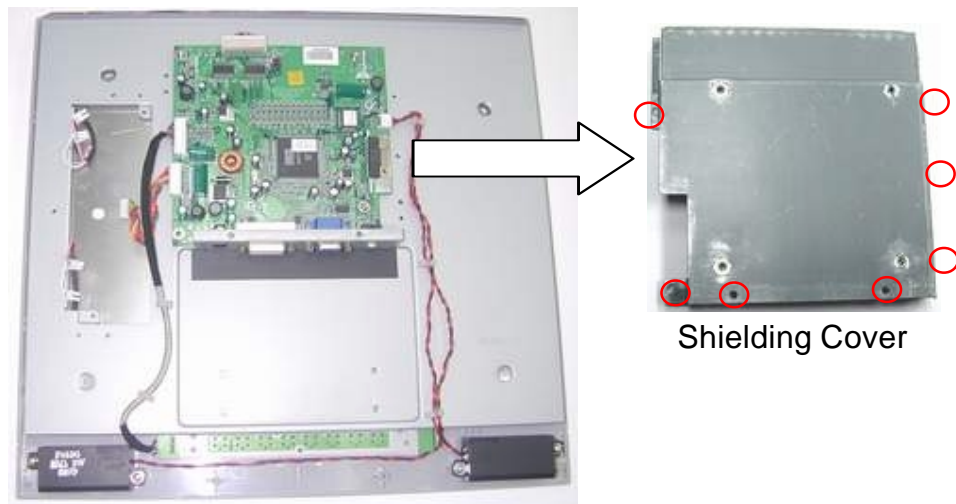
- 2.2 Unscrew three screws to remove Shielding Cover.



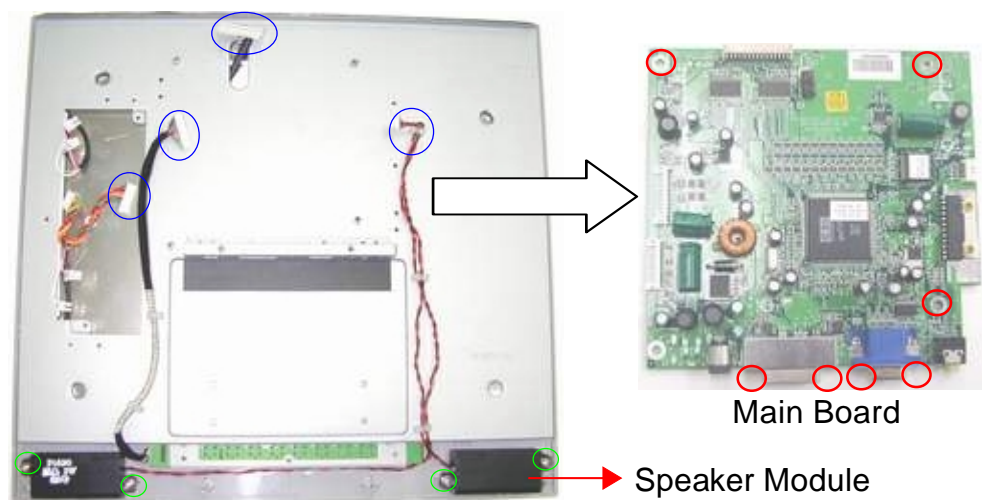
2.3 Unscrew two screws and disconnect the wires to remove Inverter Board.



2.4 Unscrew seven screws to remove Shielding Cover.



2.5 Unscrew three screws and four hex screws, and disconnect the wires to remove Main Board. Unscrew four screws to remove speaker module.



3. Removing Keypad and LCD Panel

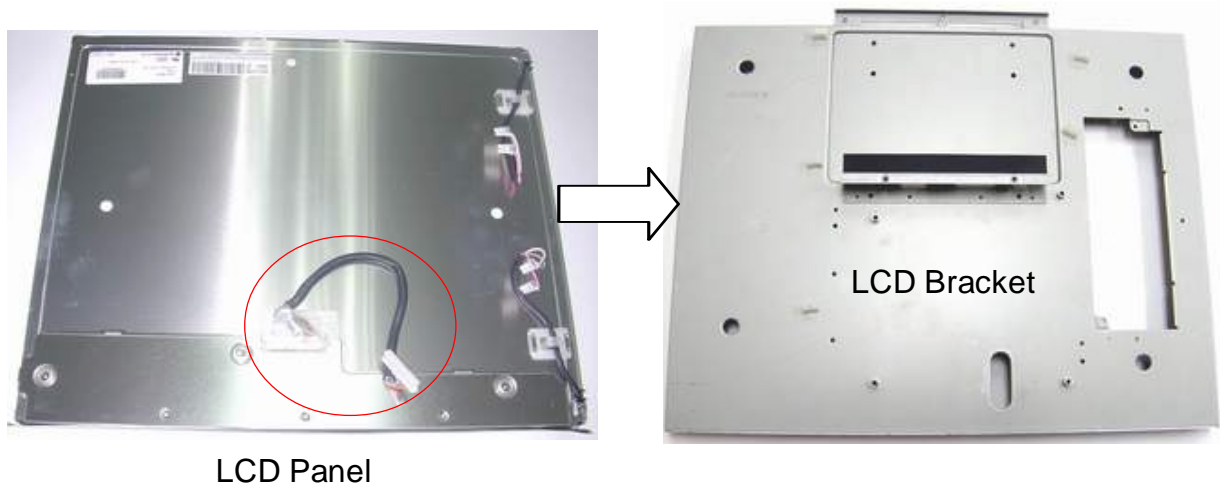
- 3.1 Press the rim of Front Cover to loosen the tenons inside, and then the Front Cover can be detached. Unscrew two screws and disconnect a wire to remove Keypad.



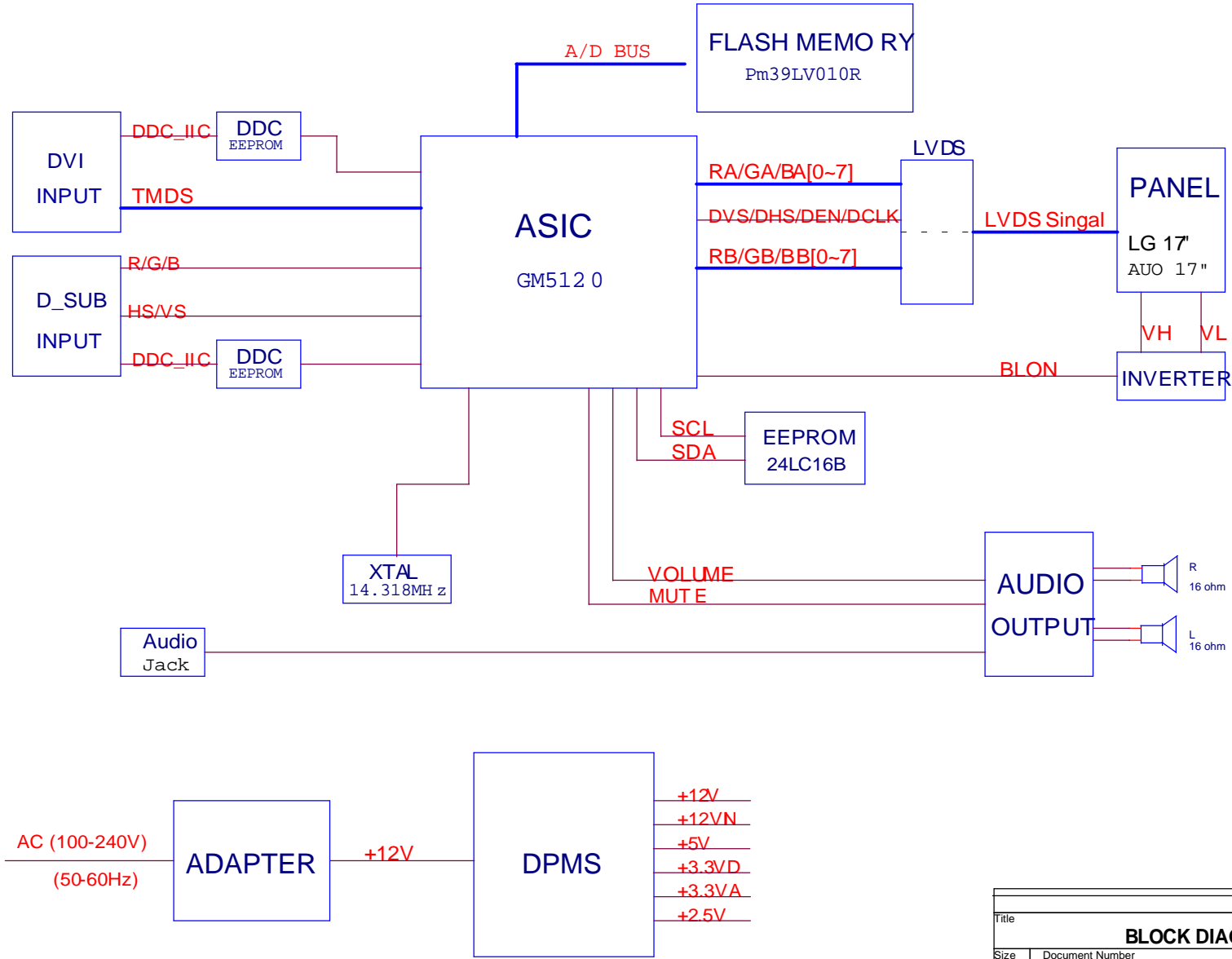
- 3.2 Lay Panel Unit facedown and unscrew four screws on its right and left sides.



- 3.3 Detach LCD Bracket from LCD Panel. Remove off the filament tape and disconnect the wire on the LCD Panel.

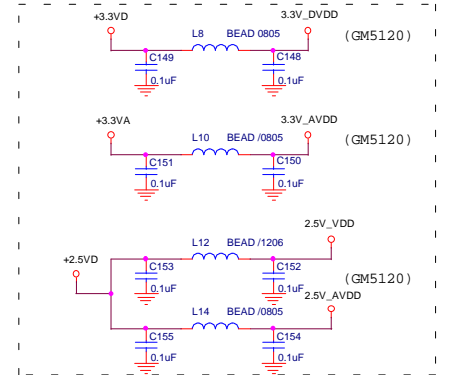
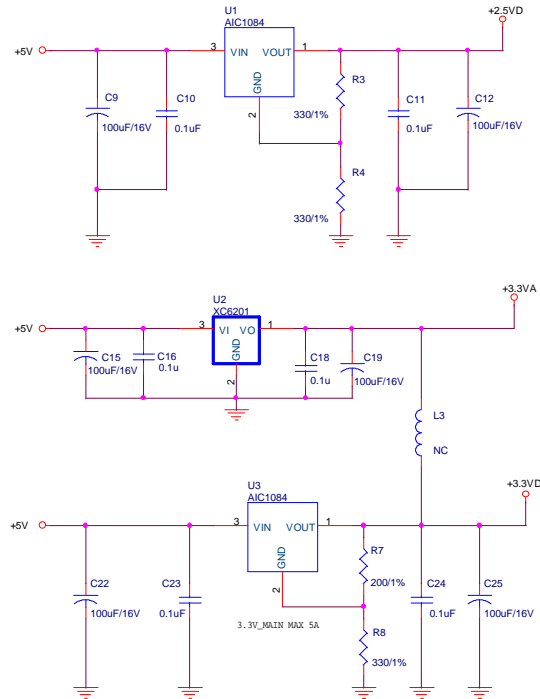
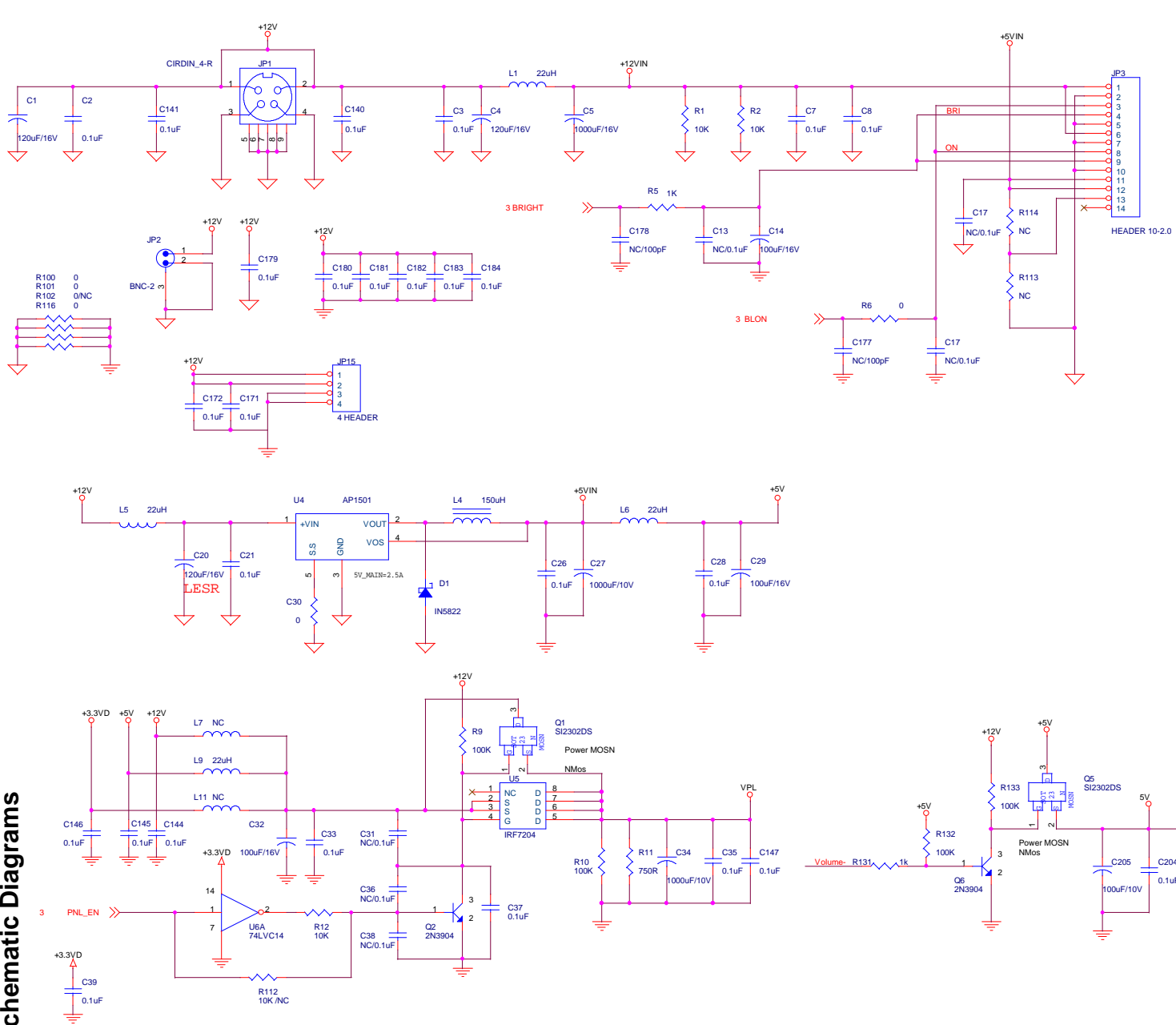


9. Block Diagram

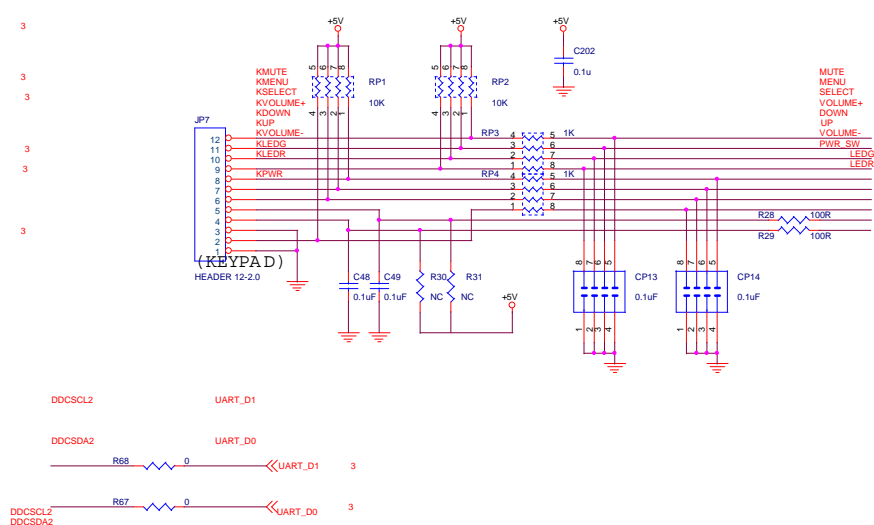
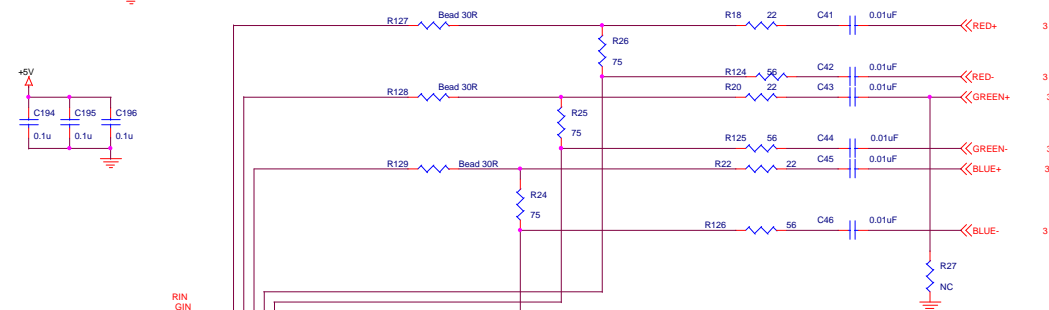


| | | | |
|---------------|-------------------------|--------------|-----|
| Title | | | |
| BLOCK DIAGRAM | | | |
| Size | Document Number | | Rev |
| | GM5120 | | E |
| Date: | Thursday, July 10, 2003 | Sheet 7 of 7 | |

10. Schematic Diagrams

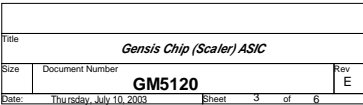


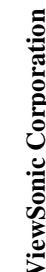
| | | | |
|-------|-------------------------|-------|--------|
| Title | | | |
| POWER | | | |
| Size | Document Number | Rev | |
| | GM5120 | E | |
| Date: | Thursday, July-10, 2003 | Sheet | 1 of 6 |



| | | | |
|---------|---|---------|---|
| MUTE | | | 3 |
| MENU | | | 3 |
| SELECT | | | 3 |
| VOLUME+ | | | 3 |
| DOWN | | | 3 |
| UP | | | 3 |
| VOLUME- | | | 3 |
| PWR_SW | ↗ | MUTE | 3 |
| LEDG | ↗ | MENU | 3 |
| LEDR | ↗ | SELECT | 3 |
| DVI_SV | ↗ | VOLUME+ | 3 |
| DSUB | ↗ | DOWN | 3 |
| | ↗ | UP | 3 |
| | ↗ | VOLUME- | 3 |
| | ↗ | PWR_SW | 3 |
| | ↗ | LEDG | 3 |
| | ↗ | LEDR | 3 |
| | ↗ | DVI_SV | 3 |
| | ↗ | DSUB | 3 |

| | | | |
|---------------------------------|----------------------------------|-----------------|--------|
| | | | |
| Title INPUT CONNECTOR | | | |
| Size | Document Number GM5120 | Rev E | |
| Date: | Thursday, July 10, 2003 | Sheet | 2 of 6 |





3 OB[0..7] << OB[0..7]
 3 OG[0..7] << OG[0..7]
 3 OR[0..7] << OR[0..7]
 3 EB[0..7] << EB[0..7]
 3 EG[0..7] << EG[0..7]
 3 ER[0..7] << ER[0..7]

DRO[0..7] >> DRO[0..7] 6
 DGO[0..7] >> DGO[0..7] 6
 DBO[0..7] >> DBO[0..7] 6
 DRE[0..7] >> DRE[0..7] 6
 DGE[0..7] >> DGE[0..7] 6
 DBE[0..7] >> DBE[0..7] 6

Select LVDS MAPPING

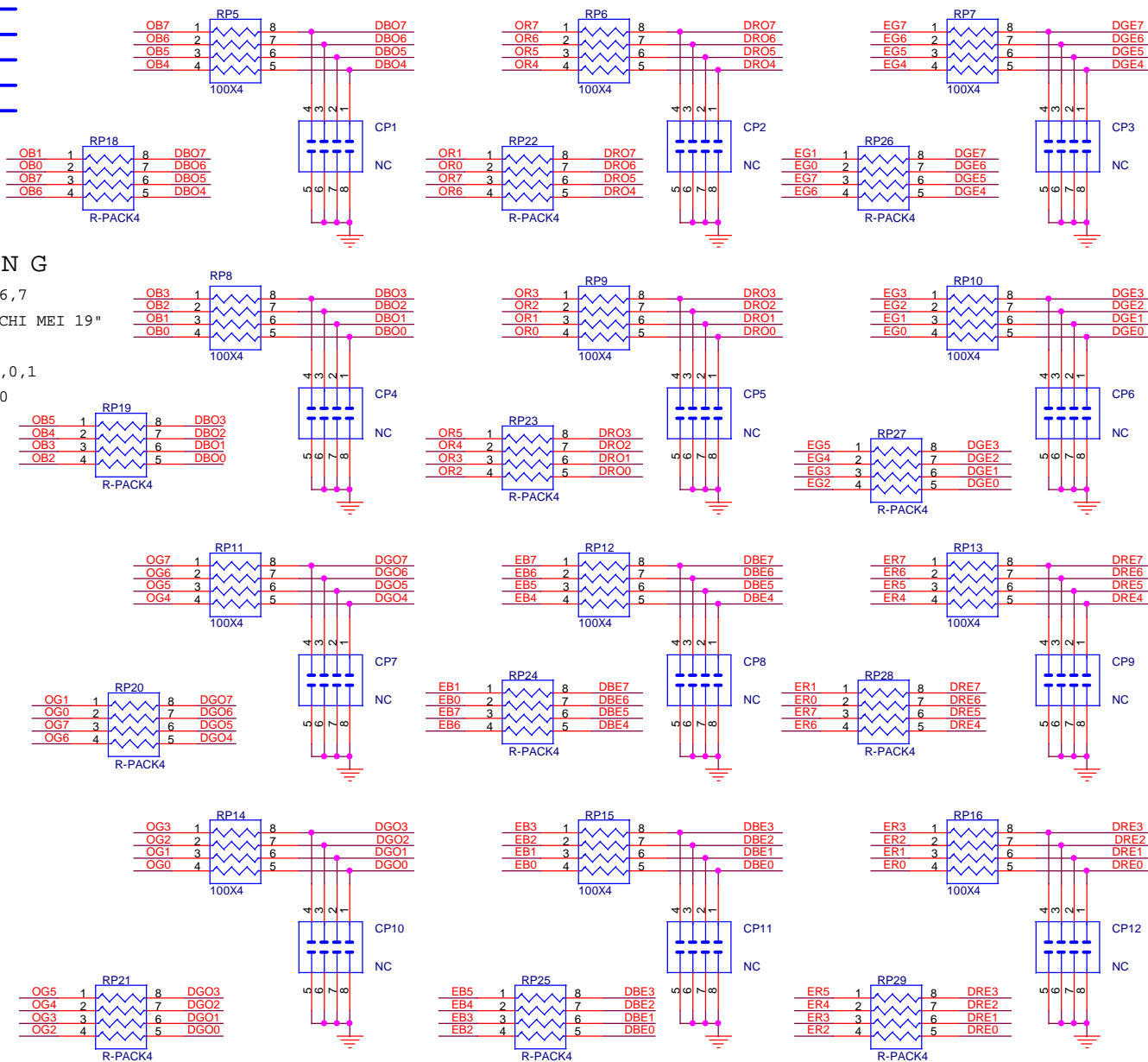
EX:RP5~RP16 for 0,1,2,3,4,5,6,7

AUO 17",19" Samsung 17",19" CHI MEI 19"

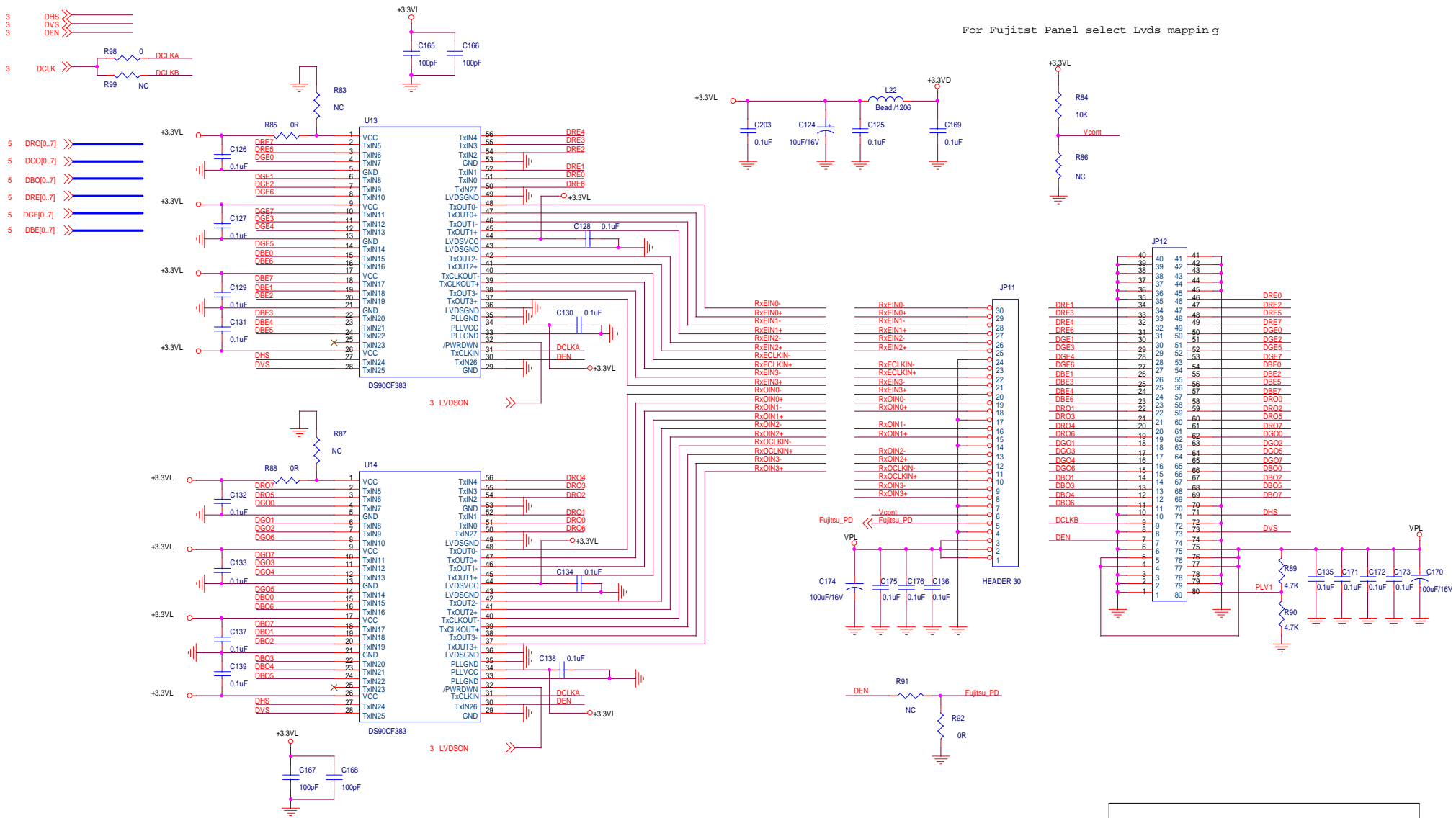
Fujitsu 19"-10

EX:RP18~RP29 for 2,3,4,5,6,7,0,1

Fujitsu 19" FLC48SXC8V-05/-10



| | | |
|------------------|-------------------------|--------------|
| Title | | |
| OUTPUT INTERFACE | | |
| Size | Document Number | Rev |
| | GM5120 | E |
| Date: | Thursday, July 10, 2003 | Sheet 5 of 6 |



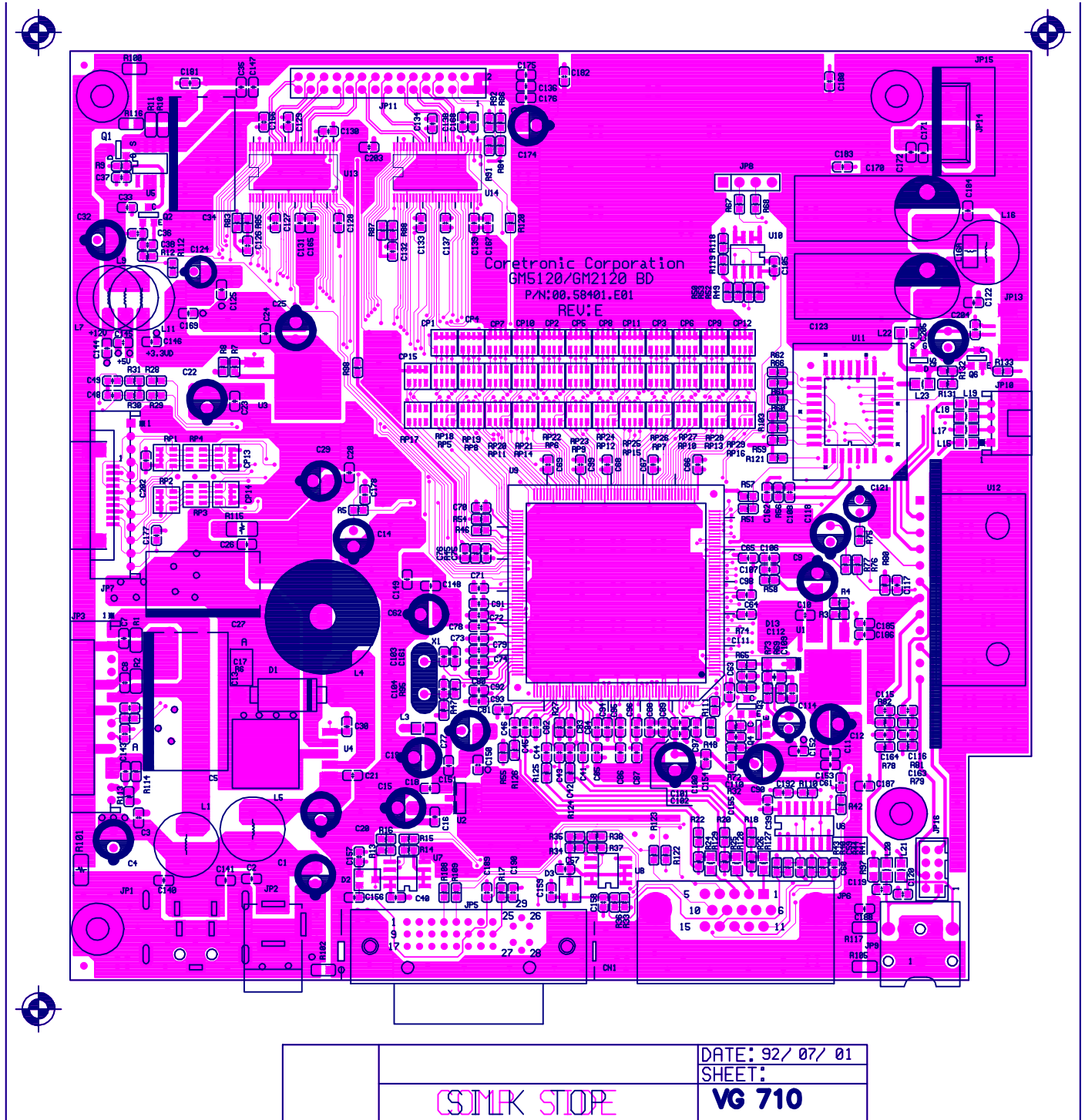
For Fujitst Panel select Lvds mapping

| | | | |
|-------------------------|-------------------------|-------|--------|
| Title | | | |
| LVDS & OUTPUT CONNECTOR | | | |
| Size | Document Number | Rev | |
| | GM5120 | E | |
| Date: | Thursday, July 10, 2003 | Sheet | 6 of 6 |

11. PCB Layout Diagrams

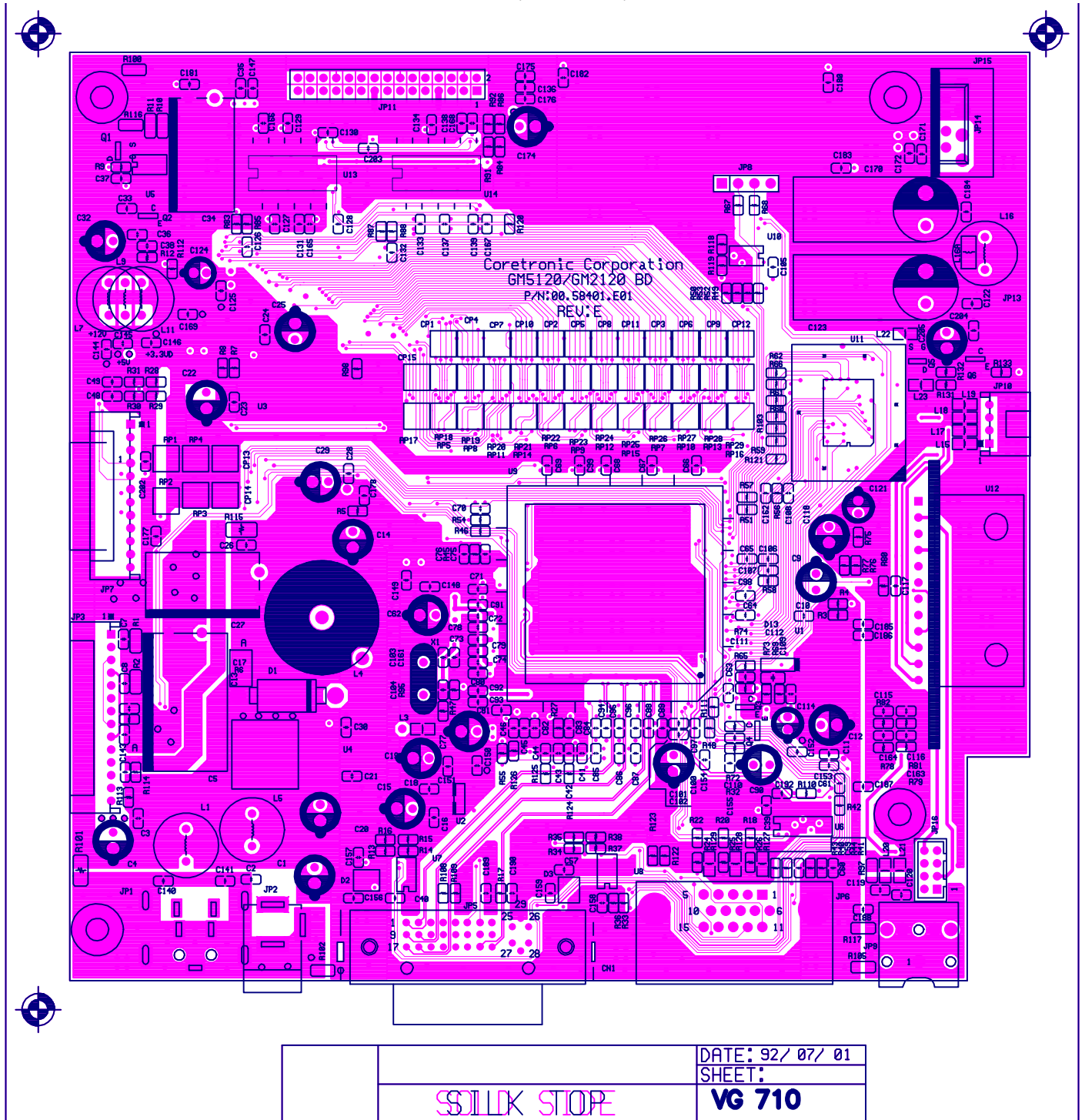
Main Board

CAM350 V 5.0 : Thu Jul 10 11:34:40 2003 - (Untitled)

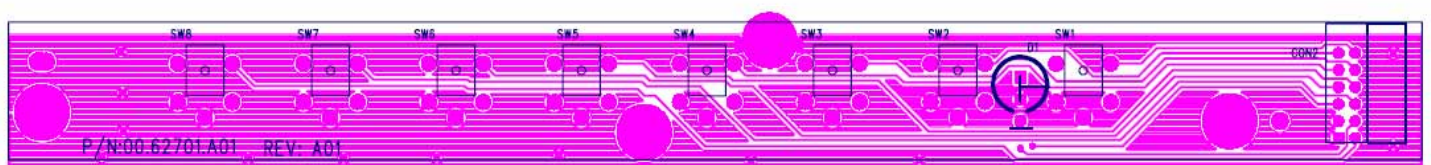


Main Board

CAM350 V 5.0 : Thu Jul 10 11:35:47 2003 - (Untitled)



Control Board



Reader's Response

Dear Readers:

Thank you in advance for your feedback on our Service Manual, which allows continuous improvement of our products. We would appreciate your completion of the Assessment Matrix below, for return to ViewSonic Corporation.

Assessment

A. What do you think about the content after reading **VG710b/s-1** Service Manual?

| <i>Unit</i> | <i>Excellent</i> | <i>Good</i> | <i>Fair</i> | <i>Bad</i> |
|---|------------------|-------------|-------------|------------|
| 1. Precautions And Safety Notices | | | | |
| 2. Specification | | | | |
| 3. Front Panel Function Control Description | | | | |
| 4. Circuit Description | | | | |
| 5. Adjusting Procedure | | | | |
| 6. Trouble Shooting Flow Chart | | | | |
| 7. Recommended Spare Parts List | | | | |
| 8. Exploded Diagram and Spare Parts List | | | | |
| 9. Block Diagram | | | | |
| 10. Schematic Diagrams | | | | |
| 11. PCB Layout Diagrams | | | | |

B. Are you satisfied with the **VG710b/s-1** service manual?

| <i>Item</i> | <i>Excellent</i> | <i>Good</i> | <i>Fair</i> | <i>Bad</i> |
|---------------------------|------------------|-------------|-------------|------------|
| 1. Service Manual Content | | | | |
| 2. Service Manual Layout | | | | |
| 3. The form and listing | | | | |

C. Do you have any other opinion or suggestion about this service manual?

Reader's basic data:

| | | | |
|----------|--|--------|--|
| Name: | | Title: | |
| Company: | | | |
| Add.: | | | |
| Tel: | | Fax: | |
| E-mail: | | | |

After completing this form, please return it to ViewSonic Quality Assurance in the USA at facsimile 1-909-839-7943. You may also e-mail any suggestions to the Director, Quality Systems & Processes (marc.maupin@viewsonic.com)